



Economic and Revenue Forecast

Fiscal Year 2011
Second Quarter

November 2010



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

Acknowledgements

The Washington State Department of Natural Resources' (DNR) *Economic and Revenue Forecast* is a collaborative effort. It is the product of information provided by private individuals and organizations, as well as DNR staff. Without their contributions, the quality of the Forecast would be greatly diminished.

We want to extend special thanks to those who provided information as part of our DNR timber sale purchasers survey. These busy individuals and companies willingly provided information that is essential for forecasting timber removal volume.

Many DNR staff also provided data, including forecasts of revenue flows for their areas of responsibility, and made significant contributions to the accuracy of the Forecast. We especially want to thank Jed Herman, Kristin Swenddal, Jon Tweedale, Chris Hanlon-Meyer, Pam LaDue, Paul Penhallegon, and Karen Jennings. Other DNR staff members provided valuable and constructive feedback on drafts of this forecast, including Craig Calhoon, Jim Smego, Dan Walters, and Cullen Stephenson. In the final analysis, the views expressed are our own and may not necessarily represent the views of the reviewers.

Thanks also to Luis Prado for designing the front cover and to Bob Redling for editing the final version.

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Table of Contents

| Section | Page |
|---|-----------|
| <u>Preface</u> | 5 |
| <u>Introduction and Forecast Highlights</u> | 7 |
| <u>Part 1. Macroeconomic Conditions</u> | 9 |
| <u>U.S. economy</u> | 9 |
| <u>World economy</u> | 17 |
| <u>Part 2. Log and Lumber Industry Factors</u> | 19 |
| <u>U.S. housing market</u> | 19 |
| <u>Lumber, log, and stumpage prices</u> | 26 |
| <u>Part 3. DNR's Revenue Forecast</u> | 31 |
| <u>Timber revenues</u> | 31 |
| <u>Upland lease revenues</u> | 38 |
| <u>Aquatic lands revenues</u> | 40 |
| <u>Total revenues from all sources</u> | 42 |
| <u>Some caveats</u> | 43 |
| <u>Distribution of revenues</u> | 44 |
| <u>Revenue forecast tables</u> | 45 |

Acronyms and abbreviations

| | |
|-------|---|
| bbf | Billion Board Feet |
| CDN\$ | Canadian dollar |
| CPI | Consumer Price Index |
| Cwt | Hundred pounds |
| CY | Calendar Year |
| DNR | Washington State Department of Natural Resources |
| FDA | Forest Development Account |
| Fed | U.S. Federal Reserve Board |
| FOMC | Federal Open Market Committee |
| FY | Fiscal Year |
| GDP | Gross Domestic Product |
| IMF | International Monetary Fund |
| ISM | Institute for Supply Management |
| mbf | Thousand board feet |
| mmbf | Million board feet |
| NAFTA | North American Free Trade Agreement |
| OPEC | Organization of Petroleum Exporting Nations |
| PPI | Producer Price Index |
| QE2 | Second round of Quantitative Easing |
| RCW | Revised Code of Washington |
| REIT | Real Estate Investment Trust |
| RISI | Resource Information Systems, Inc. |
| RMB | Renminbi, China's currency – the basic unit is the yuan |
| RMCA | Resource Management Cost Account |
| SAAR | Seasonally Adjusted Annual Rate |
| TIMO | Timberland Investment Management Organization |
| US\$ | U.S. dollar |
| WWPA | Western Wood Products Association |
| WTO | World Trade Organization |
| Y | Japanese yen |



Preface

This *Economic and Revenue Forecast* projects revenues from Washington State trust lands managed by the Washington State Department of Natural Resources (DNR). These revenues are distributed to management funds and beneficiaries as directed by statute. The Forecast information is organized by source, fund, and fiscal year.

DNR revises its Forecast quarterly to provide updated information for trust beneficiaries and department budgeting purposes. (See the Forecast Calendar at the end of this section for release dates.) We strive to produce the most accurate and objective forecast possible, based on current policy direction and available information. Actual revenues depend on DNR's future policy decisions and changes in market conditions beyond our control.

This Forecast covers fiscal years 2011 through 2015. Fiscal years for Washington State government begin on July 1 and end on June 30. For example, the current fiscal year, FY 2011, runs from July 1, 2010 through June 30, 2011.

The baseline date (the point that designates the transition from "actuals" to forecast) for this Forecast is September 30, 2010, the end of the first quarter of FY 2010. The forecast beyond that date is based on the most up-to-date market and economic information available at the time of publication, including DNR's timber sales results through October 2010.

Unless otherwise indicated, values are expressed in nominal terms without adjustment for inflation. Therefore, interpreting trends in the Forecast requires attention to inflationary changes in the value of money over time separate from changes attributable to other economic influences.

Each DNR Forecast builds on the previous one, emphasizing ongoing changes. Before preparing each Forecast, international and national macroeconomic conditions and the demand and supply for forest products are re-evaluated. The impact on projected revenues from DNR-managed trust lands is then evaluated, given the current economic conditions and outlook.

DNR Forecasts provide information used in the *Washington Economic and Revenue Forecast* issued by the Washington State Economic and Revenue Forecast Council. The release dates for DNR's Forecasts are determined by the state's Forecast schedule as prescribed by RCW 82.33.020. The table below shows the anticipated schedule for DNR's future *Economic and Revenue Forecasts*.

Economic Forecast Calendar

| Forecast Title | Baseline Date | Draft Revenue Data Release Date | Final Data and Publication Date (approximately) |
|-----------------------|----------------------|--|--|
| March 2011 | End Q2, FY 2011 | Mar. 4, 2011 | Mar. 31, 2011 |
| June 2011 | End Q3, FY 2011 | June 3, 2011 | June 30, 2011 |
| September 2011 | End Q4, FY 2011 | Sept. 2, 2011 | Sept. 30, 2011 |
| November 2011 | End Q1, FY 2012 | Nov. 4, 2011 | Nov., 30, 2011 |



Introduction and Forecast Highlights

Housing Markets. Sales of existing and new homes remain at historic low levels despite lower home prices and record low interest rates. The number of households has fallen as a result of jobs lost in the economy, and home loan foreclosures remain at record high levels. Despite record low new home construction levels over the last two years, there is still an oversupply of some two million existing homes. After increasing for over a year, existing home prices have once again begun to fall. We don't expect new home construction to recover significantly over the next year or two as it will take that long for the oversupply of existing homes to be reoccupied.

Lumber, Log and DNR Stumpage Prices. Since we did the September Forecast, lumber prices have increased by 12 percent, to the point where they are placing upward pressure on log prices. During that time period log prices increased by just 4 percent. We expect lumber prices to continue to increase over the next six months in part because of seasonal factors. Actual DNR timber sales during September and October averaged \$319/mbf, almost \$70/mbf or 22 percent more than we forecast in September.

DNR Timber Stumpage Prices. The forecast average timber sales price for FY 2011 was increased by \$25/mbf to \$235/mbf. This was due to higher than expected sales prices in September and October but primarily to higher forecasted timber sales prices for the remainder of the FY 2011. We have also increased the FY 2012 stumpage price by \$20/mbf to \$245/mbf. Recent strength at DNR timber sales is attributed to high export demand for logs.¹

"We can all breathe a little easier now."

*Peter Goldmark
Commissioner of Public Lands
At the December 2010 Board of Natural Resources meeting
Commenting on current timber market conditions*

Longer term, we continue to be pessimistic about the recovery of the U.S. housing market and its impact on stumpage prices.

Timber Sales Volume. We have made no changes in our planned sales and removal forecasts.

¹ Washington state law prohibits direct export of unmilled logs from state trust lands.

Bottom Line for Timber Revenues. As a result of the increase in forecast timber removal prices, forecast timber revenues are up from the September Forecast by \$6.5 million, or 4 percent, for FY 2011 and up \$22.7 million, or 7.2 percent, next biennium.

Lease and Other Non-timber Revenues. We have not significantly reduced the forecast level of non-timber revenues. However we have made two shifts in the expected timing of those revenues. First, \$7.0 million in one-time revenues from the sale of communication towers and equipment is now expected to occur in FY 2012 rather than FY 2011. We have also shifted the expected timing of the last two installments of the Taylor Shellfish trespass settlement from FY 2011 and FY 2012 to FY 2012 and FY 2013.



Part 1. Macroeconomic Conditions

This section briefly reviews current and predicted conditions of the U.S. and world economies because these macroeconomic conditions affect the stumpage bid prices for Washington State Department of Natural Resources' (DNR) timber sales.

Prospects for the U.S. economy going forward are, as Federal Reserve Chairman Bernanke told Congress on July 21, “unusually uncertain” and there is a significant downside potential. Economic reports continue to be contradictory and volatile. Employment, housing, and personal consumption reports suggest continued stagnation or very slow recovery while manufacturing output reports have generally been more positive. Still, capacity utilization in manufacturing is only 72 percent, well below its pre-recessionary level of 80 percent and well below the level needed to stimulate investment in new capacity.

The recent announcement by the Fed of further quantitative easing (QE2) and the extension of tax cuts and other Federal stimulus should help booster the U.S. economy above what we expected in September.

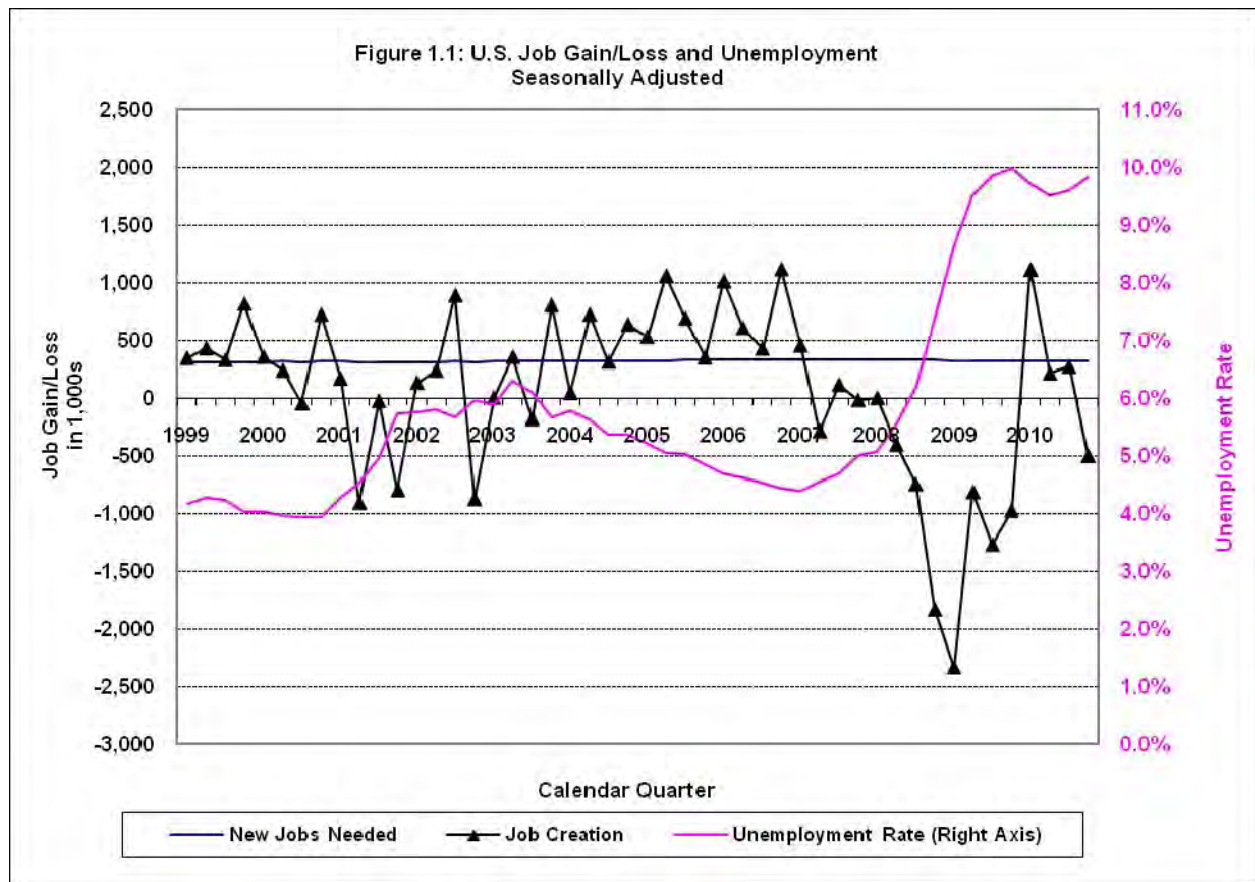
International supply and demand also affect domestic timber stumpage prices and lumber prices. On the supply side, Canada has a strong influence on the U.S. wood products sectors as it is a major source of lumber which can enter U.S. markets quite readily. On the demand side, China is an increasingly important market for world commodities including wood products.

U.S. economy

“On its current economic trajectory the United States runs the risk of seeing millions of workers unemployed or underemployed for many years. As a society, we should find that outcome unacceptable.”

*Ben Bernanke,
Fed Chairman
November 18, 2010*

Employment. For the second and third quarters of calendar 2010 the economy managed to create enough jobs to keep unemployment unchanged, but the recent job numbers have been



bleak as the nation lost about a half million jobs in the first two months of the fourth quarter and the unemployment rate is once again on the rise. **See Figure 1.1.**

The number of unemployed now stands at just over 15 million, 7.8 million more than October of 2007 before the Great Recession began.

The unemployment rate and growth in GDP are inversely related. Because of normal annual growth in the workforce (about 1 percent) and the increase in productivity (about 2 percent), real GDP needs to grow by about 2.5 to 3.0 percent just to keep unemployment from increasing. For the three months ending in September, GDP grew at annual rate of just 2 percent. At this rate the unemployment rate would be expected to increase by about ½ of one percent per year.

The economy needs to grow at more than double that rate, say 5 percent, in order to shrink the unemployment rate by just one percentage point per year. Even if that happens, which almost no economist is predicting for the next couple of years, most in the job market would feel little difference. An 8.5 percent unemployment rate is still much higher than the 5 percent considered normal. It will take GDP growth at 4 percent for nine years to bring unemployment down to 5 percent.

The construction sector, which usually leads the economy out of recession, will lag the general economic recovery. The official unemployment rate in the construction sector is at 20 percent and this probably understates the real level of unemployment and under employment in this

sector. Another factor that will contribute to slower than usual employment recovery is the loss of jobs in the public sector. State and local governments continue to struggle to balance budgets.

The massive shakeout in the labor market that occurred during this recession will lead to a generally higher rate of unemployment for much of the forecast period. (See page 10 of the September 2010 forecast for more detail.) The consensus of economists seems to be that unemployment will remain high—between 9 and 10 percent—for the next couple of years at least. This will reduce the rebound in consumer confidence and consumer spending, which will in turn be a drag on economic recovery. Resource Information Services Inc.'s (RISI's) forecast shows the unemployment rate will remain above 8.0 percent until 2013.

With all the headwinds the economy faces, we expect sluggish GDP growth of less than 3 percent next year, in which case unemployment will improve only marginally, falling by just one percent per year for the next four years.

“The harsh reality is that it will take tremendous growth in the GDP even to make a small dent in the unemployment rate.”

*Nin-Hai Tseng
Economics and Financial Reporter
Fortune.com
November 16, 2010*

Inflation. The Consumer Price Index (CPI), a key measure of inflation, increased 1.2 percent over the past 12 months ending in October. After stripping out volatile food and energy prices, the core CPI rose just 0.6 percent on an annual basis, the smallest price increase since the government started recording the data in 1957. As shown in orange on **Figure 2.1** (on page 20), the U.S. inflation rate has been running at 1 percent on a year over year basis for the last two quarters. A rate of inflation around 1 percent is considered sluggish, and raises concerns of deflation.

Core rates have been under the Fed's target of two percent for almost two years. In its November 3 statement, the Federal Open Market Committee (FOMC) said that longer-term inflation expectations remain stable, and that underlying inflation has trended lower and is now below levels consistent with its dual mandate—to promote a high level of employment and low, stable inflation.

Going forward, unit labor costs have been falling on a year-over-year basis in each of the past three quarters, and a large pool of unused U.S. labor will keep the wages low as long as unemployment remains high. Firms are producing well below capacity, giving them the ability to absorb an increase in commodity prices while increasing production with existing plant and equipment.

Counteracting the disinflationary forces described above is the growth demand in China and other developing countries which is exerting upward pressure on energy, food and other commodity prices. Oil prices have traded around \$70-\$85 so far in 2010, but we expect benchmark oil prices will average around \$90 to \$100 over the forecast period.

On balance, we expect U.S. inflation will remain low (under 2 percent) through most of the forecast period as low wages costs more than offset the higher commodity prices.

Interest Rates. U.S. interest rates are at or near record lows at all points on the yield curve. The Fed funds rate has remained in the 0-0.25 percent range since December 2008. Ten-year treasury bonds are at 3.27 percent, down from 4 percent in April. And conventional 30-year fixed rate mortgages are at new lows of just 4.50 percent, down from 5.25 percent last year.

With inflation expectations low, and the economy sputtering, as expected the FOMC announced that it will move forward with the purchase of an addition \$600 billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about \$75 billion per month, the so-called “QE2”. One of the objectives of this move is to push interest rates down even further.

Interest rates have been falling ever since QE2 was announced and it is already having its desired effect of reducing interest rates, increasing inflation, demand, and employment. But we believe that this will take longer than currently anticipated and therefore the Fed will keep interest rates low through most of the forecast period.

A number of economists and pundits have suggested that QE2 will not work as the U.S. economy is already awash in liquidity. We are not in this camp. The first round of quantitative easing (QE1) of around \$2.3 trillion had a very positive and significant effect on the economy even though it came during the financial crisis. By some estimates QE1 added more than one percentage point to real GDP growth in 2009, and almost three percentage points in 2010, in addition to stabilizing and unfreezing financial markets.

QE2 is only a quarter of the size of QE1 and therefore is not expected to have nearly the same type of beneficial impact, adding perhaps 0.1 to 0.2 percentage points to GDP growth in 2011. Further quantitative easing is not without risk, but given the opportunity to boost employment, the risks are worth taking. And given the fact that the likelihood of fiscal stimulus coming out of Washington is neutral at best, QE2 is the only real option available to get the economy moving again.

Consumption. Personal consumption expenditures are the total of final purchases of goods and services by individuals in an economy. Total consumption is defined as disposable personal income minus savings, and disposable personal income is defined as total personal income minus taxes. Consumption is a strong indicator of the overall health of the economy.

Since consumption is a function of income, it is no surprise that household consumption fell off in the U.S. economy during the last two calendar years, down by 0.3 percent in 2008 and 0.6 percent in 2009, as the U.S. economy lost millions of jobs. This contraction in consumption was unparalleled going back to the Great Depression.

Consumer spending finally turned up again in late 2009 and continues up in 2010 through August. However, household spending remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Even though there is believed to be considerable pent-up demand building, it will be difficult for the U.S. consumer to drive a strong and sustainable recovery until these underlying limiting factors improve.

During this recessionary period, people with jobs have also become more conservative with their spending (consumption), paying down their debt and increasing their savings. It is likely that at least for some time U.S. households will partake less in the asset-leveraged and credit-fueled spending that characterized the last decade.

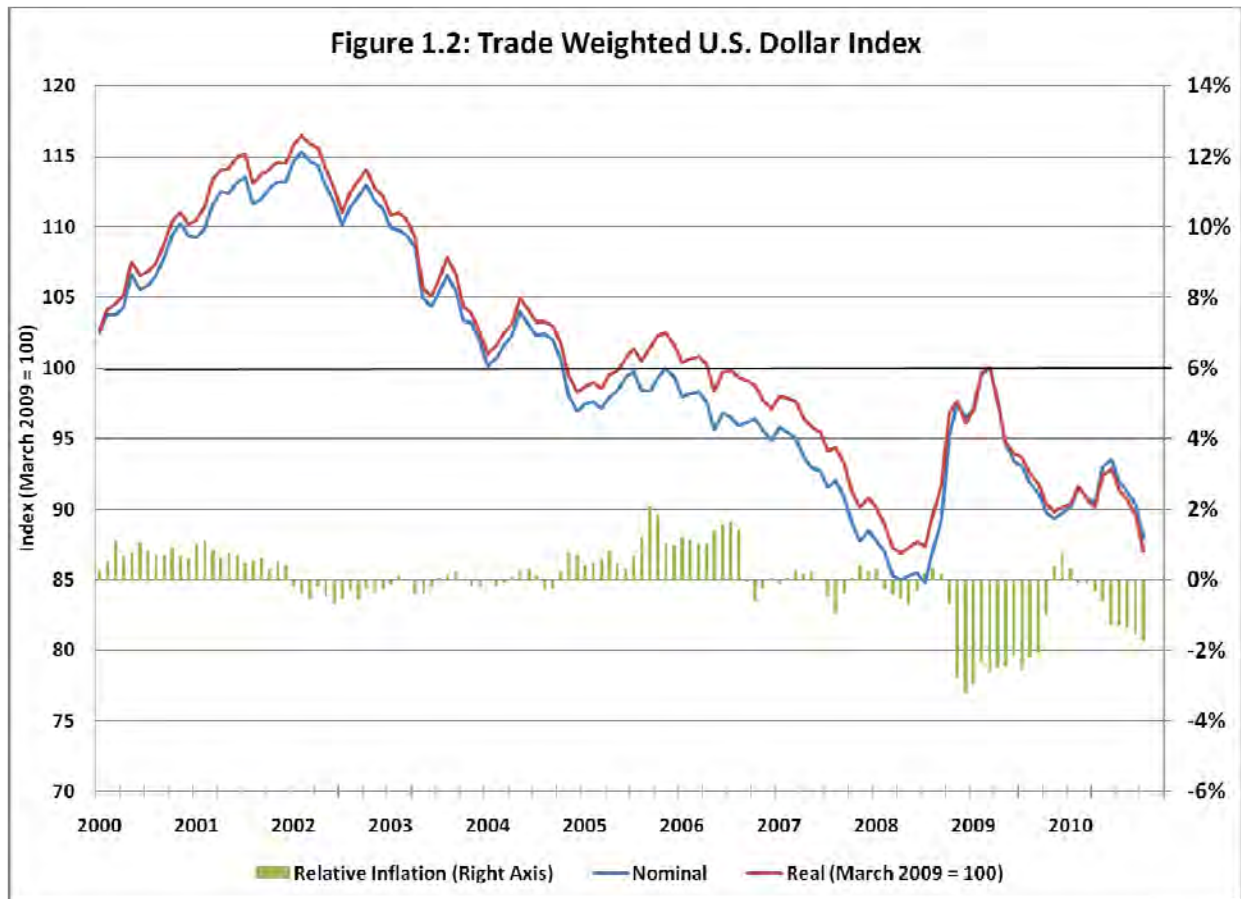
The high jobless rate is the single most important factor weighing on the recovery in the U.S. consumer sector and, therefore, the U.S. economy as a whole. Besides the direct effect of unemployment on many households, a weak labor market also serves to limit wage growth. Our forecast for a persistently high rate of unemployment over the forecast period will result in lackluster growth in real disposable income and consumption. We predict real consumption will grow at just 2.2 percent over the next five years compared to 2.8 percent between 2000 and 2008.

Trade and the U.S. Dollar. The Fed announced QE2 at the end of August and since then the dollar has lost about 4 percent in real terms. **Figure 1.2** shows the trade-weighted U.S. dollar index for the last decade. After a low point in the spring of 2008, the relative value of the dollar rose sharply during 2008 as the financial crisis went global and the U.S. dollar was seen as a safer haven for investors looking out on a bleak global financial landscape. The dollar index peaked in spring 2009 and then fell to a new low at the end of the year. The dollar strengthened during the first half of 2010 as the U.S. economy strengthened, but since June the dollar has lost about six percent of its value in real terms as the U.S. economy has weakened relative to our trading partners.

QE2 is expected to put further pressure on the dollar versus many of the world's currencies. A weak currency will help US exporters, and could reverse the current drag that trade exerts on GDP. However, there are some potential downsides to a weak dollar. For one, the intentional debasing of the dollar could lead other countries to also attempt to devalue their currencies in order to better compete. Historically, such beggar-thy-neighbor policies have led to increased protectionism and trade wars, both large net negatives for the global economy. Second, China and other net holders of U.S. bonds might try to diversify their portfolio by buying other assets. The net sale of securities could offset the positive impact of QE2 on interest rates.

Quantitative easing is almost universally viewed internationally as a ploy to weaken the dollar since the Fed is trying to create inflation. In the long run, a weaker dollar is still the trend.

*John Derrick, director of research
U.S. Global Investors, San Antonio
November 17, 2010*



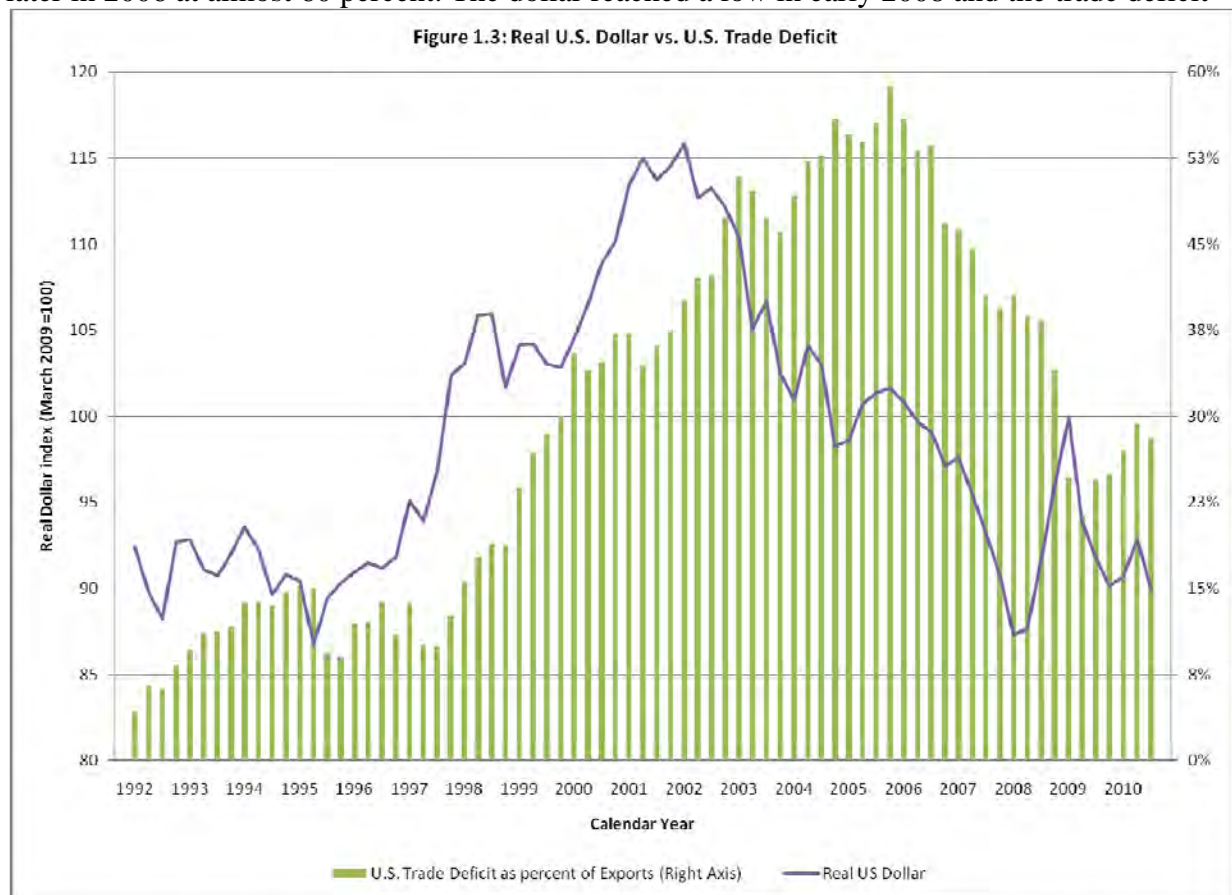
Over time, the strength of a currency should reflect the relative strength of the economies of the countries where that currency is issued, so quantitative easing, if successful in boosting the U.S. economy, could actually strengthen the dollar.

Figure 1.2 shows that U.S. inflation is currently running about 1.5 percent below the average inflation rate of our trading partners, which tends to increase the nominal value of the U.S. dollar.

The U.S. dollar is again benefiting from its safe-haven currency status due to the debt crisis in Europe. The Fed and QE2 have quickly taken a backseat to worries about Ireland's financial health and whether it will need (or even accept) a bailout. All the negative information about the dollar will be quickly forgotten if a financial crisis surfaces anywhere in the world.

In general we expect the dollar to fall over the forecast period as the economies of our trading partners grow faster than the U.S. economy, but we don't expect a precipitous decline, contrary to all the concern over the impact of QE2 on the U.S. dollar.

Figure 1.3 shows the relationship between the real U.S. dollar and the U.S. trade deficit as a percentage of U.S. exports. The trade deficit generally follows the dollar but with a considerable lag. For example, the dollar peaked in early 2002 but the trade deficit peaked about four years later in 2006 at almost 60 percent. The dollar reached a low in early 2008 and the trade deficit



fell to a low of 23 percent of exports in early 2009. For the first three quarters of 2010, the dollar has generally moved sideways while the trade deficit has increased.

In September, U.S. exports climbed to the highest level in two years, increasing by 0.3 percent to \$154.1 billion. This helped narrow the trade deficit to \$44 billion or 28 percent of exports.

A falling dollar also has strong effects on commodities. Since most commodities are priced in dollars, a decline in the dollar will cause prices for commodities to rise, as we have been seeing in crude oil, metals, and basic food products. Rising commodity prices will have a negative impact on U.S. trade deficit, the economy, and could result in stagflation. Stagflation is a period of slow economic growth and high unemployment (stagnation) while prices rise (inflation).

U.S. Gross Domestic Product (GDP). During the final quarter of 2009 and the first quarter of 2010 real gross domestic product (GDP) growth was at a respectable 4.4 percent. Growth in the second quarter was just 1.7 percent. Real GDP growth improved to a 2.5 percent annual rate in the third quarter.

The good news is that GDP continued to grow for the fifth quarter in a row. The bad news is that the rate of growth has fallen below that required to reduce unemployment. As a consequence, the U.S. economy is caught in a slow jobless recovery. In all previous recoveries, the Fed has been able to drop interest rates, leading to an increase in the demand for housing which, in turn, stimulated employment and brought the economy out of recession. Despite record low interest rates, this time the normal route to recovery through the housing sector is blocked by a surplus of existing homes and something else is needed to jumpstart the economy.

The Fed recognizes that the economy is not growing fast enough on its own and despite strong criticism at home and abroad is using other means (i.e. QE2) to stimulate growth and employment.

We believe Mr. Bernanke is doing the right thing for the U.S. economy and will put the economy on a path to recover. Still, that will not happen overnight. We estimate it will take two years to eliminate the oversupply of housing and the economy will grow at below its potential until then.

RISI continues to believe that growth in the developed economies will slow in 2011. Their forecast shows U.S. GDP growing at 2.6 percent for all of 2010, and decelerating to 2.1 percent next year.

“In the United States, we have seen a slowing of the pace of expansion since earlier this year. The unemployment rate has remained close to 10 percent since mid-2009, with a substantial fraction of the unemployed out of work for six months or longer. Moreover, inflation has been declining and is currently quite low, with measures of underlying inflation running close to 1 percent. Although we project that economic growth will pick up and unemployment decline somewhat in the coming year, progress thus far has been disappointingly slow.”

*Ben Bernanke
Fed Chairman
November 18, 2010*

World economy

The tables have been turned between the developed and the developing world. While the major advanced countries struggle with slow growth at just 2.5 percent for 2010, the developing world is growing at 7.1 percent. It seems to have made it through the Great Recession with growth remaining positive at 2.5 percent last year and struggles with excess demand and inflation while the developed world is still struggling to pull out of the vortex of the Great Recession.

China reported third quarter real GDP growth of 9.6 percent, and despite a slowdown from 10.3 percent in the second quarter and 11.9 percent in the first quarter, the numbers indicate that China has managed to engineer a soft landing for its economy. China's real GDP growth in 2010 is expected to remain close to double digit levels.

The stronger than expected GDP numbers should allow China to turn its focus to needed structural reforms of the economy which were put off in order to maintain high levels of growth during the recession. Increasingly China's focus will be more on "economic development" as opposed to just "economic growth." China will focus on the development of domestic markets as opposed to exports, with the goal of reducing exports to less than 4 percent of GDP from the current 5.5 percent. To accomplish this, export growth which has surged will be scaled back to an annual growth of 9-10 percent from the over 30 percent seen in the boom time period of 2003-2008.

As high levels of growth return to China so will rising prices in the real estate sector as well as commodities including food. Consumer inflation is currently running at a 4.4 percent on a year-over-year basis. A 4.4 percent inflation rate might not sound like much, but compared to 1 percent inflation in the U.S., it puts added strain on the already large imbalances between the two largest world economies.

Ireland is now the second of the “PIIGS” (Portugal, Ireland, Italy, Greece, and Spain) to require a bailout to survive. Since we did the September Forecast, the Ireland bond has increased by 1.5 percent to over 8 percent (10-year bonds). It remains to be seen how attempts to enforce austerity will play out economically, socially, and politically as European governments attempt to cut

government pay rates, cut government services, raise retirement ages, and reduce pensions. The IMF expects the European Economic Union to grow at just 1.7 percent this year and just 1.5 percent in 2011. We continue to keep a wary eye on the Euro-zone. Worst case scenario, what was once unthinkable, the Euro-zone could unravel, which short run could spark another financial crisis.

The downside risks to global growth outweigh the upside risk, stemming in part, from lingering financial risk in a number of areas of the world including Europe, Japan, and Dubai. Tensions are rising about China's purported manipulation of its currency's exchange rate and Brazil's finance minister recently said that the world is in the midst of an international currency war.



Part 2. Log and Lumber Industry Factors

This chapter focuses on specific factors that affect timber stumpage prices and overall timber sales revenues received by the Washington State Department of Natural Resources (DNR). Timber stumpage prices reflect demand for lumber and other wood products, timber supply, and regional and local lumber mill capacity. The demand for lumber and wood products is directly related to the demand for housing and other end-use markets.

U.S. housing market

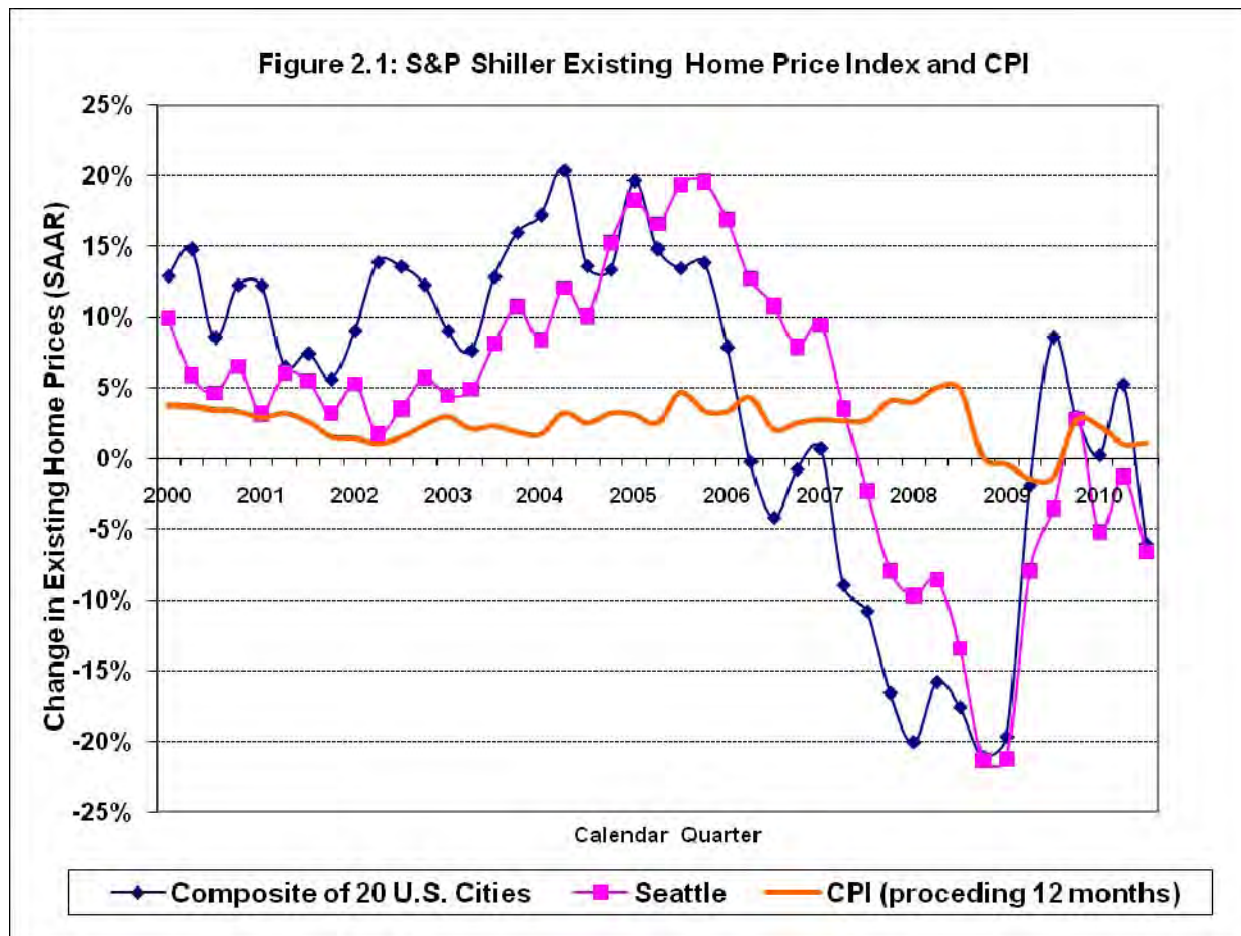
“We still have downward pressure on home prices that stems from two things: supply and demand.”

*Brad Hunter
Chief Economist for Metrostudy
November 30, 2010*

Housing Prices. U.S. home prices fell at a seasonally adjusted annual rate (SAAR) of 6 percent in the third quarter after having gained steadily since early 2009. That leaves national home prices down 0.5 percent year-over-year. The index is still 5 percent above its low reached in May 2009 and is now down almost 30 percent from its peak. In real terms (after adjusting for inflation) prices not only have lost what they gained during the bubble, but are back to where they were in 2001.

The current reduction in prices (second dip) is very widespread. Only one city in the index (Washington D.C.) showed positive price growth in September and that was very small—just 1 percent Seasonally Adjusted Annual Rate (SAAR); only two cities (Washington, D.C. and New York) showed positive price gains for the third quarter that were small increases as well (1 percent and 2 percent respectively). The three cities in California which had been a bright spot during the short lived upturn were down by an average of 9 percent (all prices SAAR) in the third quarter. Seven cities have erased their gains over the last year and set new lows in September.

The Seattle index has fallen for the last four months at an annual rate of 7 percent and is off 3 percent for the last 12 months. Seattle housing prices have fallen for the last three quarters and are now down 17 percent from their peak. See **Figure 2.1** below².



Home prices are now falling just about everywhere and it appears there are more price declines coming. Most housing experts now think that housing prices have not yet reached the bottom and will lose an additional 10 percent or so next year, and we agree. The outlook for existing home prices remains bleak in part because of the unprecedented number of mortgage loan foreclosures. This places a huge inventory of housing units into the ownership of banks and other financial institutions, which are motivated to move the properties at a discount to cut their carrying costs. This “shadow inventory” will act as a drag on housing prices for the next several years.

The abrupt fall in housing prices also puts even more pressure on Americans who find their houses worth less than the amount of their mortgages (“negative equity” or “under water”). This negative equity will likely lead to more foreclosures as people lose their jobs or are otherwise financially stressed. At best, many find themselves captive in their existing homes (which some have dubbed as “house arrest”), reducing their mobility and making the economy less dynamic.

² The Case-Shiller Index is seriously lagged in time and is based on a three month rolling average.

Existing Home Sales. Existing home sales, which plummeted after the homebuyer tax credit expired in April, continue to fall. As shown on **Figure 2.2**, sales of existing homes fell by 25 percent in the third quarter while the inventory of existing homes for sale increased by almost 5 percent. The number of existing homes for sale has now been increasing for over a year and the inventory has shot up to over 11 months worth at current sales rates.

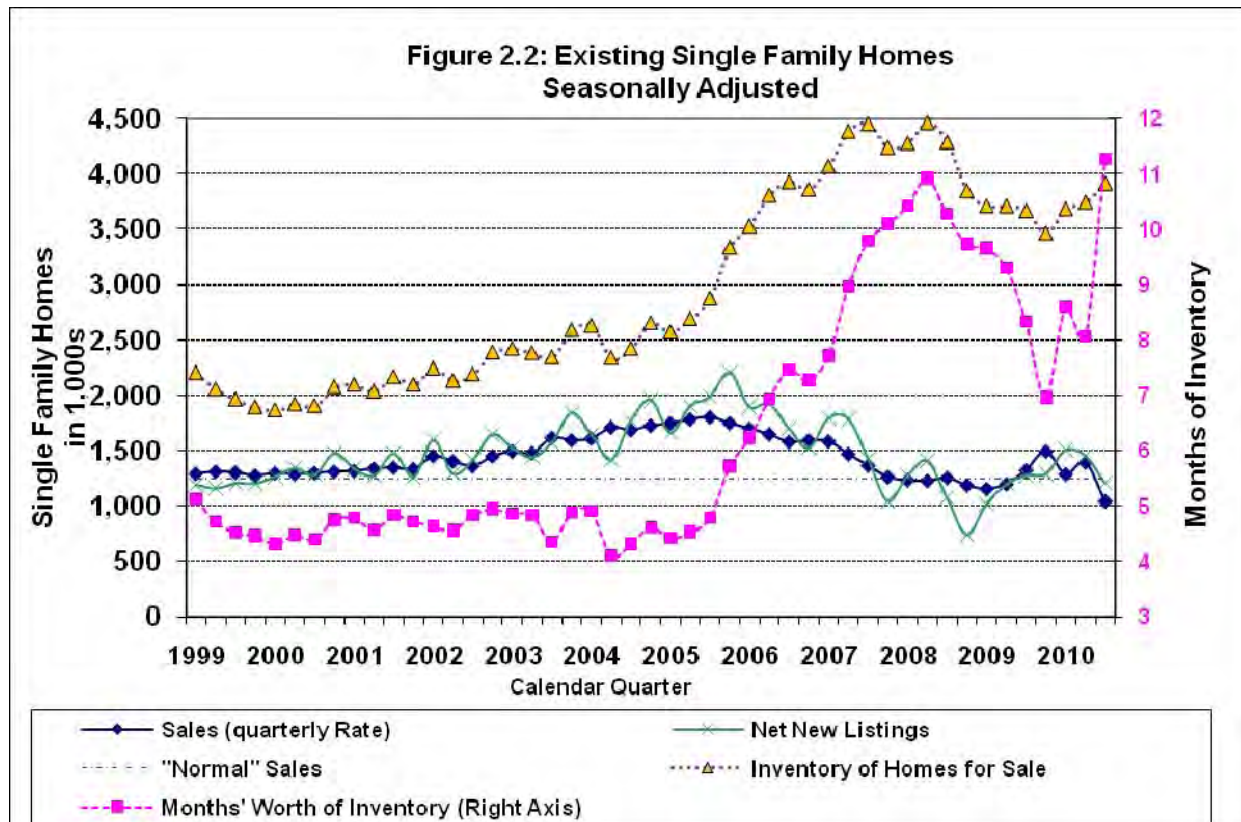


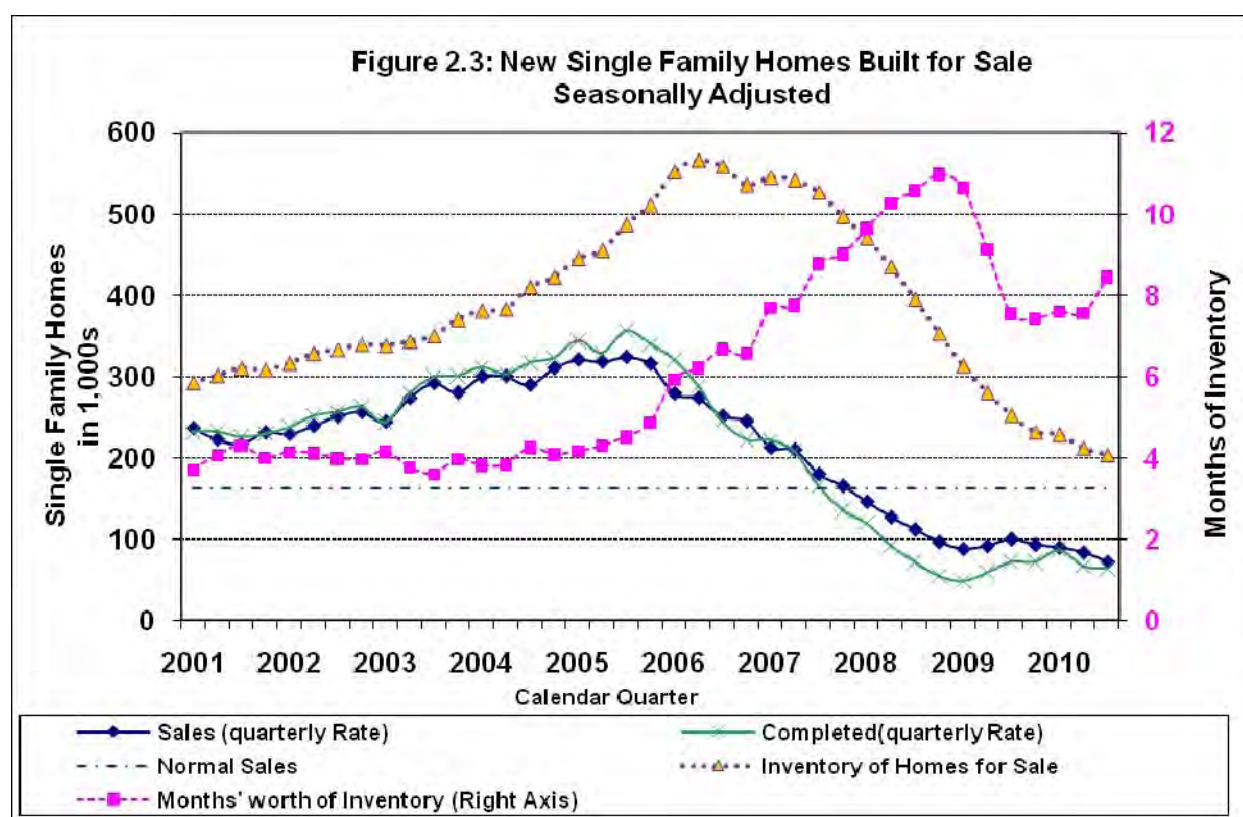
Figure 2.2 also shows that after increasing for the last three quarters in 2009, sales of existing homes are once again trending down and set a new low in the third quarter. Sales have once again fallen below normal rates³.

The excess supply of existing homes is the most important factors weighing on the housing market at this time. The homeowner vacancy rate currently is at 2.5 percent, the normal rate for recent years appears to be about 1.7 percent. This means there are approximately 500,000 excess vacant homes. The rental vacancy rate is about 10.6 percent, normal is more like 8 percent. This means there are about a million excess multifamily units for rent. This suggests there are still about 1.5 million excess housing units. These excess units will keep pressure on housing starts, rents and house prices for some time.

³ The median turnover for existing homes is just over 6 percent of all owner occupied homes per year, and with about 75 million owner occupied homes that would suggest close to 5 million sales per year or 1.25 million per quarter.

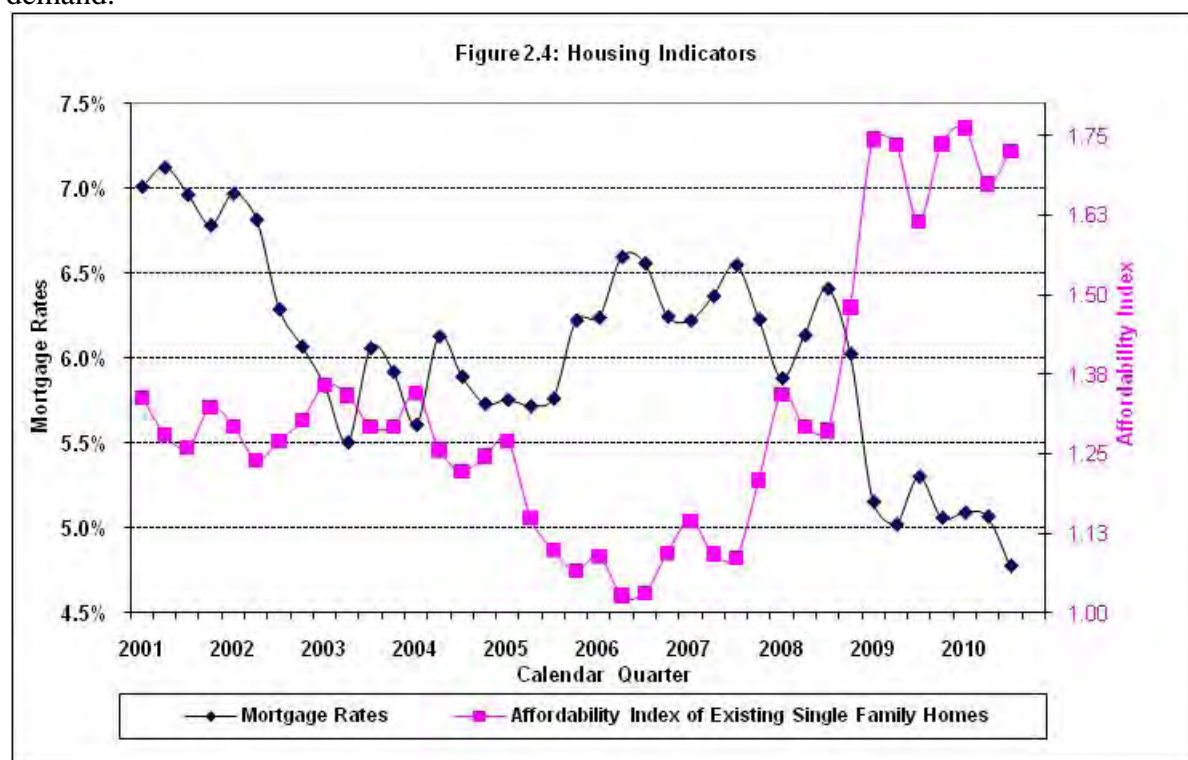
Sales of distressed properties will peak in 2011 at 2.3 million transactions before falling to more normal levels at 850,000 in 2016, according to a report from John Burns Real Estate Consulting. Because lenders are transferring more of the shadow inventory of foreclosed and defaulted mortgages into real property ready for the market, analysts at John Burns estimate these properties will account for more than 40 percent of all resale activity through 2012.

New Home Sales. New home sales dropped to an annual pace of just 283,000 in October, just 44 percent of the normal rate of 650,000 per year. Sales of new U.S. homes fell off much more dramatically than sales of existing homes during the recession. From the peak in 3Q 2005 to the low point in 1Q 2009, sales of existing homes fell by 36 percent. In the same period, sales of new homes fell by a whopping 72 percent (compare the rates of sales for existing homes and new homes in **Figures 2.2 and 2.3**). And unlike sales of existing homes, which turned up throughout 2009, sales of new homes stayed relatively flat through 2009 and now are falling again in 2010. New home sales reached a new low in August 2010 of just 275,000 SAAR, a quarterly rate of only 69,000.



The dramatic drop in new house construction has also served to bring down the inventory of newly built homes to the lowest level in 10 years. At a high in July 2006, there were 572,000 new single family homes available to purchase in the United States. In July 2010, there were only 210,000 (see **Figure 2.3**). However, because sales are so low, the months' worth of inventory of new homes increased in July to 8.7 months (compared to pre-bubble level of just 4.2 months).

Affordability. U.S. mortgage loan rates have fallen to their lowest on record (see **Figure 2.4**). In September, the 30-year fixed mortgage rate was down to 4.67 percent. The family income required to qualify for a mortgage on the \$172,600 median-priced existing single family home in the United States at September's rate of 4.68 percent is only \$34,272 per year. This compares with an average qualifying income of \$45,984 in 2008 and \$52,992 in 2007. Median family income was \$61,395 in September, compared to an average of \$63,366 in 2008 and \$61,173 in 2007. At least for those families whose wage earners still have jobs, housing prices and mortgage rates have fallen more rapidly than family income, but this is having little impact on housing demand.



The **Affordability Index** is the ratio of median family income and the income required to qualify for the median-priced existing single-family home. In September 2010, the affordability index was \$61,395/\$34,272 or 1.791.

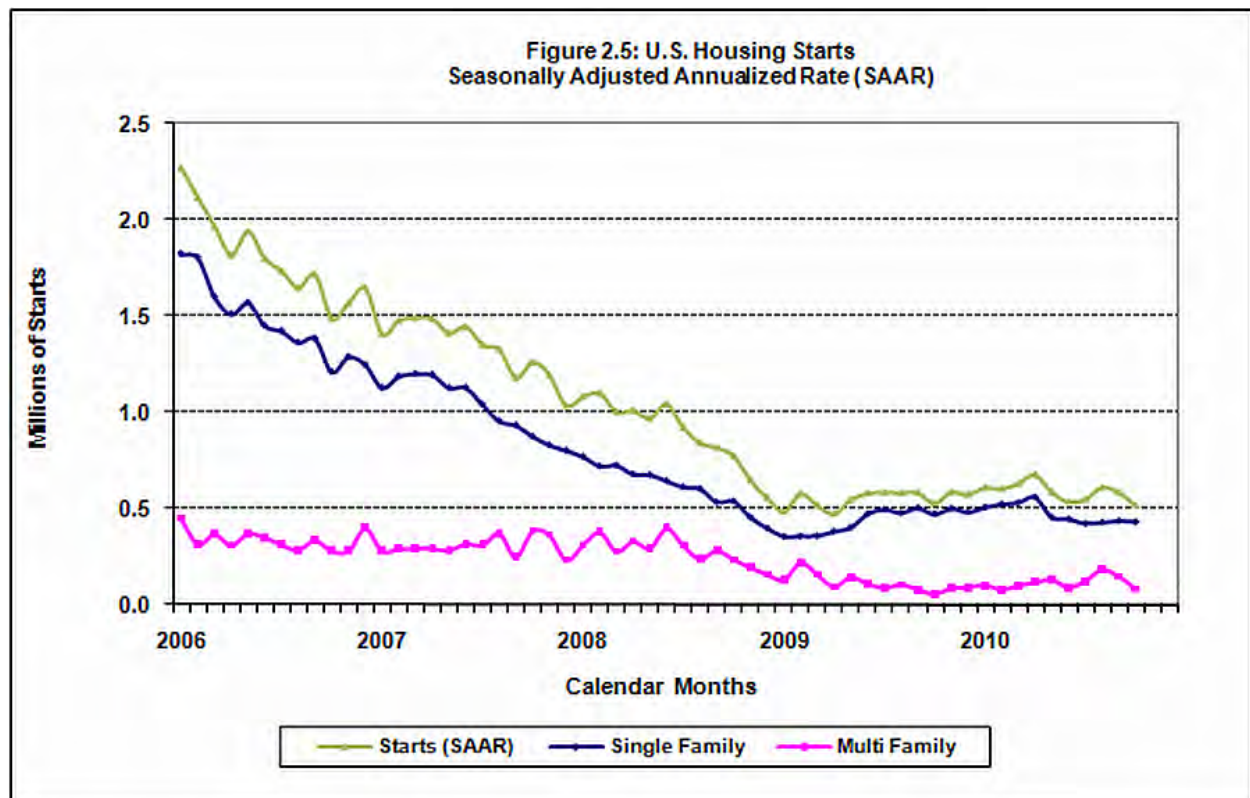
“Low mortgage rates will likely continue to encourage refinancing, but their influence on home buying activities has been limited due to the weak housing market and a lack of demand.”

Erkan Erturk
S&P credit analyst

Housing Starts. Housing starts continue to bounce along the bottom. Starts in October 2010 were the lowest in a year and a half at just 519,000 SAAR. While single family housing starts have held mostly steady over the last six months, multifamily starts have been much more erratic and turned down during the last two months. See **Figure 2.5** for detail. One of the early signs of

a recovery will be an increase in multifamily starts, so the recent downturn is especially disappointing.

Behind the slowdown in demand for housing is the slowdown in household formation, which not only is a result of the recession but then feeds back to prolong the recession. Household formation typically stalls during a recession as people move in with family or friends, or share rentals. Young adults are less likely to leave their parents' home to form new households if they are unemployed. Recent surveys suggest that young U.S. adults are also delaying marriage and childbearing for economic reasons.

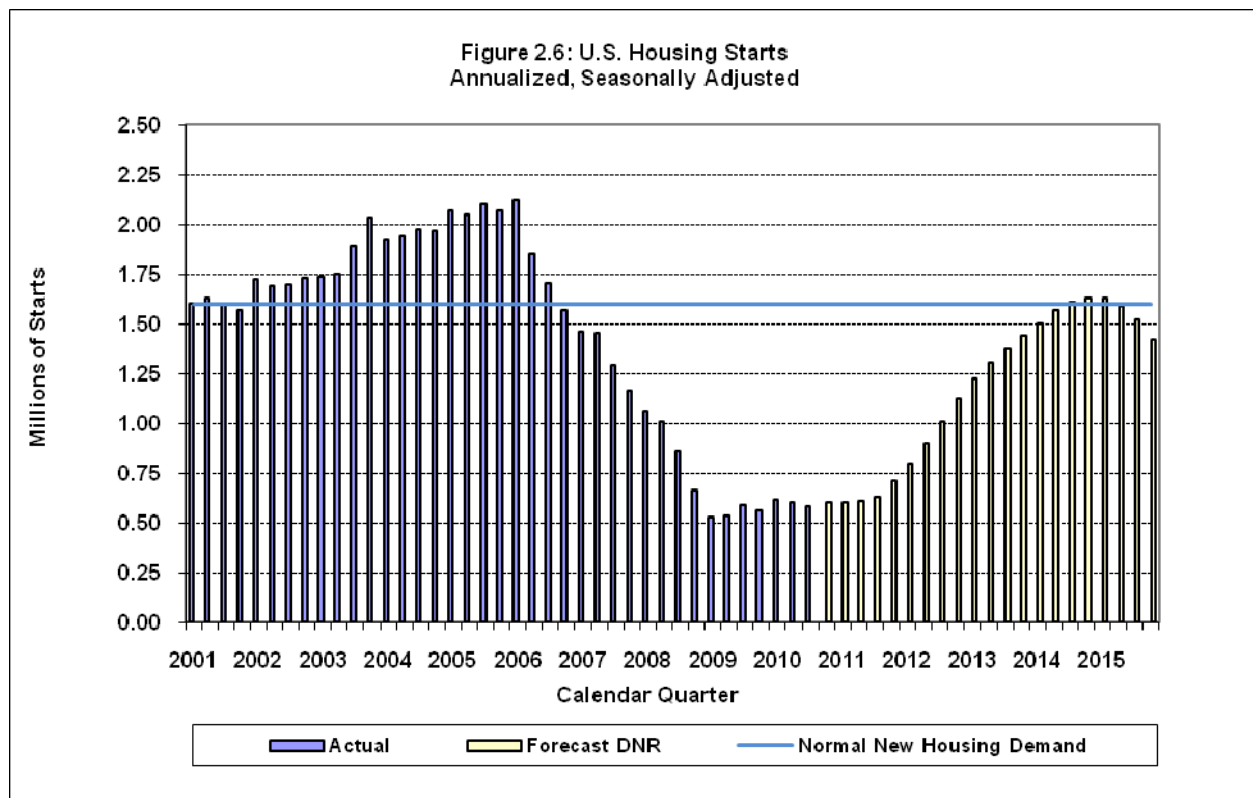


The U.S. actually lost 1.2 million households from 2005 to 2009. It now appears that household formations in 2010 will be zero or even negative. The normal rates of household formation of around 1.2 million new households per year won't return until the job market recovers. And the housing market won't return to more normal levels until household formation does and the current excess inventory of existing homes is depleted.

Despite the extremely low level of starts, there is very little evidence yet that we are under-building compared to current demand, since vacancy rates and, therefore the apparent excess inventory, have not fallen yet. A common misconception is that foreclosures account for the housing glut. The truth is more complicated. A foreclosure (2.5 million in 2009) or a bank taking possession of a home (about 1 million in 2009, according to Realtytrac.com) does not by itself add to the housing glut. If a household vacates a home and moves into a rental unit, the glut is

unchanged. It increases, however, if the household moves in with another household (“doubling up”), or becomes homeless.

Figure 2.6 shows the annual rate of new housing starts in the U.S. since 2001 by quarter. It clearly shows that the United States overproduced new housing units during the housing bubble (i.e., housing starts exceeded the normal 1.6 million annual rate of new housing demand). The rate then fell off dramatically from 2006 to 2009 and remains in a rather flat trough.



We are forecasting that starts will be flat for another year or so. Even this could be optimistic as the household formation rate in the United States is at a record low. The sharp drop in household formation largely explains why the housing glut remains stubbornly high, despite the plunge in housing starts in recent years. We estimate the current level of excess inventory at about 1.5 million units but others have put the excess at 2 to 3 million. It will take an additional two or three years to reabsorb this oversupply. Given we are already five years into the housing collapse and have three to five years until full recovery, this period will have lasting impact on the demand for housing of at least a generation, perhaps longer.

In addition, we expect that both immigration and natural demographic growth will slow and US population growth will slow to 1 percent after the Great Recession from 1.5 percent before. Given the dramatic changes in financial terms and perceptions of housing as an investment, we believe the single-family share will decline over the forecast period. We expect the share of single family starts to fall from 75 percent prior to the Great Recession to just 60 percent post recession.

Lumber, log, and stumpage prices

Lumber Production. U.S. West coast mills produced 7.9 bbf of lumber through September, 9.3 percent above the same period last year. With domestic housing starts remaining stagnate, the best hope for lumber mills is improved cost competitiveness and the U.S. dollar remaining weak. The U.S. West Coast's market share is expected to move higher through the forecast period as efficient mills lower the region's production costs, lumber exports grow and Canada suffers from supply constraints.

Timber Supply. The outlook for timber supply in the U.S. is generally positive. Timber removals in all U.S. regions remain at levels well below the peak levels of the last decade and below sustainable cut levels. In fact, the volume of timber harvested in Washington in 2009 was the lowest since 1903 and in Oregon the lowest since 1934.

World Export Trade. The last six months has been very exciting for log exporters operating in Washington. Volumes shipped to China have ballooned for both Douglas-fir and hemlock. Shipments to South Korea are also up. Exports to Japan are holding steady. U.S. logs exported to China have leapt forward, totaling 207 mmbf in the third quarter—that's an annual rate of about 830 mmbf or half the harvest off of Washington's private lands⁴.

Today, China is the driving force in Pacific log markets. The return of rapid economic growth and construction activity in China is increasing their demand for forest products. China is by far the world's biggest importer of softwood logs, accounting for about a third of globally traded logs in 2010 an estimated six billion board feet. During the first six months of this year, imports were up 17 percent from the same period in 2009, reaching the highest level on record, according to Wood Resource Quarterly.

While China's need for wood is growing, its domestic supplies are depleted and log inventories are low, so all of the increased demand must come from increased imports. Historically, China has gotten the majority of its log supply from Siberian Russia. Russia imposed a 25 percent export tax on logs in 2008 and announced its intentions to increase the tax to 80 percent. Those increases have been postponed twice and just this month Russia has agreed to reduce its export tax on logs to Europe after it joins the World Trade Organization (WTO), but it's not yet clear just how this tax will impact China.

In response to the export tax and growing demand, China has been substituting supplies from other regions. Russian log exports to China fell from a record 5.5 billion board feet in 2007 to less than an annualized 3.3 billion projected for this year.

⁴ Most of the statistics on export logs are in cubic meters. Export logs are usually larger diameter. We used the industry standard of 4.52m³ per MBF, scribner. So multiply m³ prices by 4.52 and divide m³ volumes by 4.52 to convert to MBF, scribner.

Until recently most of the increased log imports have come from New Zealand, but New Zealand suppliers have hit physical limits and, consequently, radiata pine prices have shot up from \$298/mbf in the second quarter of 2009 to \$407/mbf in the second quarter of 2010, posting nearly a 40 percent gain in one year.

This has opened a window for U.S. log exporters and North American lumber exports. Faced with a rapid rise in sawlog prices, both Korea and China expanded their imports of United States-sourced hemlock. Canada is now a primary source of softwood lumber imports for China, accounting for 40 percent of total Chinese imports of softwood lumber in the first half of 2010. China is expected to continue to diversify its supply sources, likely in the direction of import substitution toward semi-processed timber products obtained from a wider range of supplying regions.

Six Washington ports are now available for bulk shipments of logs. Previously, log export activity had become concentrated in the ports of Longview and Tacoma. With new port capacity now operational, the accessible supply area has greatly expanded. Investment in debarking equipment to address China's requirements for fumigation will also allow the Washington exporters to have greater access to Chinese markets. We are now seeing a premium on log prices in the Puget Sound region over southwest Washington and Oregon of as much as \$80/mbf which we attribute to the increased export activity in that area. RISI anticipates US log exports will climb further in 2011 and 2012. The forecast is based on U.S. domestic log demand remaining in the gutter, strong fundamentals in the Chinese market and a generally weak US dollar.

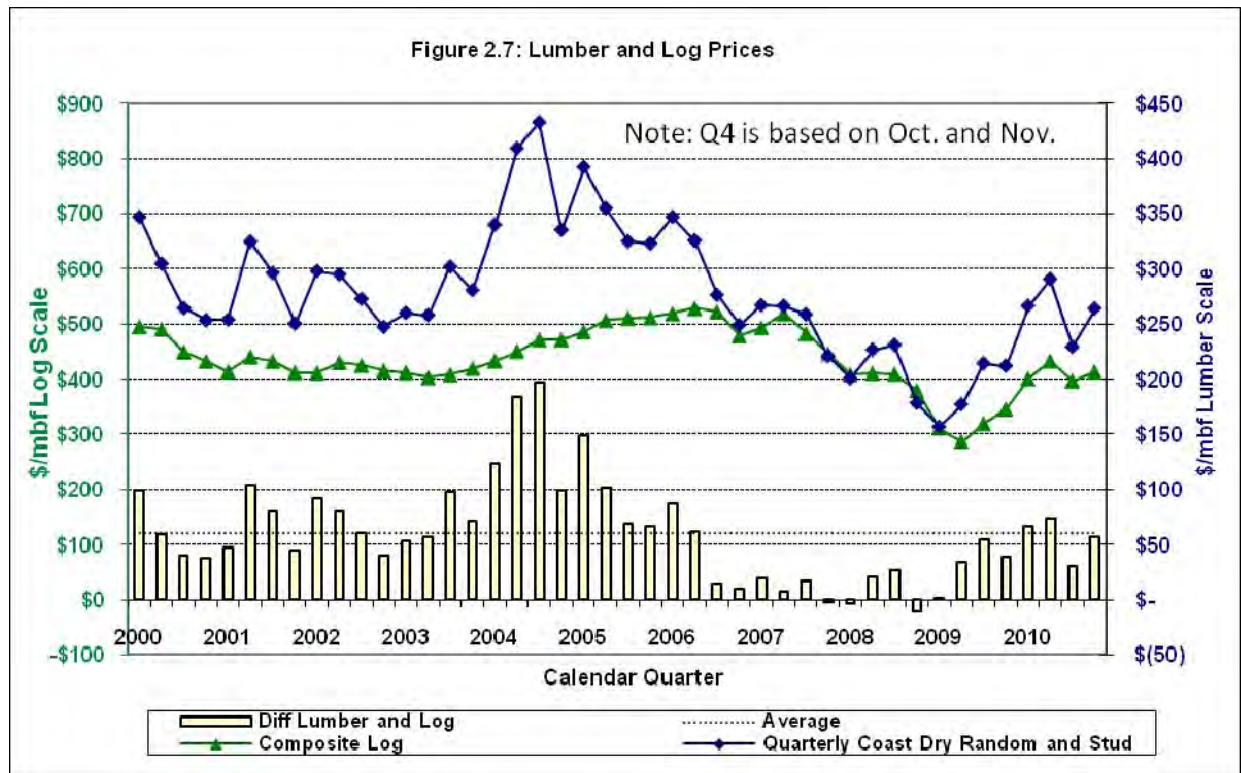
China has always been very price conscious. Most of the Chinese lumber needs are for lower value uses such as pallets, containers and furniture parts rather than for construction lumber. So China will be quick to shift to other supplies if U.S. prices increase. There currently is a \$100/mbf premium on log exports over domestic prices so it's not surprising that close to half the harvest from private lands is going export. Continued strength in China and other Pacific markets will continue to boost Washington stumpage prices above what they otherwise would have been.

We expect Washington's log export volumes will continue to rise, but price increases will be limited and may fall from current levels.

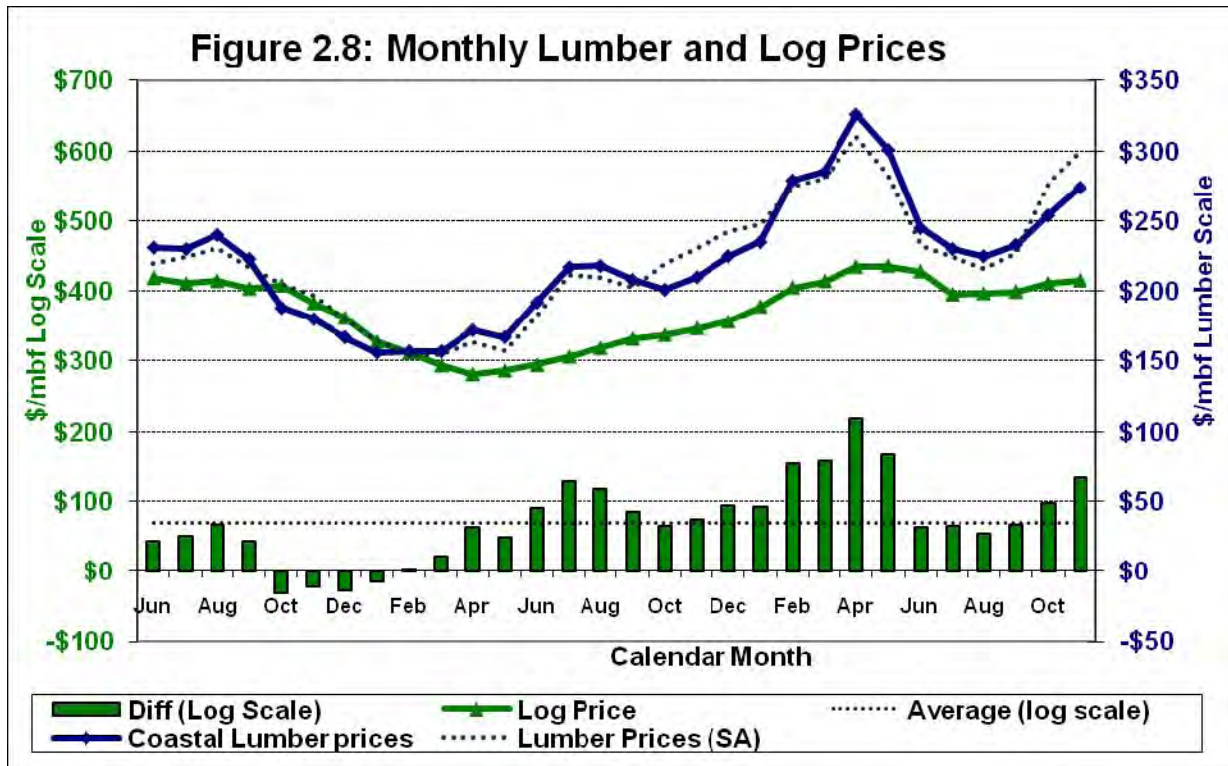
Lumber and Log Prices. Lumber and log prices spiked in April at the height of the inventory adjustment phase, as we expected they then fell as inventories returned to normal levels, but they didn't fall back to previous low levels and in August lumber prices were still 12 percent above the previous low and have now increased for 3 months by a total of 22 percent (see **Figures 2.7 and 2.8**).

It is obvious that lumber and log prices are not being driven up by strong aggregate U.S. demand for building materials, as housing starts continue to remain at Depression levels, nor do we attribute this latest increase to another inventory adjustment, as the usual "spring rally" happens in April, May, and June when lumber prices are on average 6 percent above the year's average. The fourth quarter is usually the low quarter of the year when lumber prices are some 8 percent **below** average. After adjustment for seasonality, current lumber prices are just 3 percent below

the peak in the spring. And if we see a spring rally this year on top of the current lumber prices, lumber will be at \$347/mbf, prices not seen since 2006.

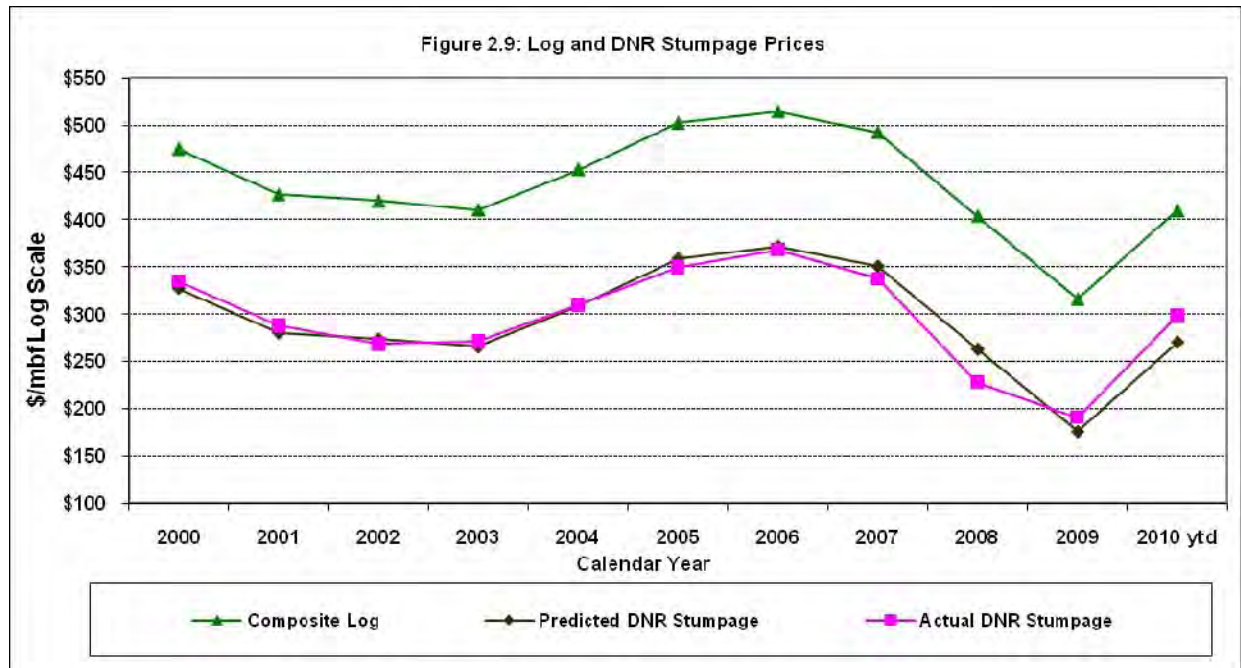


Log and DNR Stumpage Prices. Figure 2.9 shows prices for logs, predicted DNR stumpage, and actual DNR stumpage on an annual basis since 2000. The “composite log price” represents actual prices for logs delivered to the mill weighted by the average geographic location, species,



and grade composition of timber sold in DNR timber sales. The “predicted” DNR stumpage price is calculated by deducting \$150/mbf for the log price to account for logging, transportation, and other costs of getting the standing timber to the mill.

Both log prices and predicted DNR timber sale prices were highest in 2006, when the composite log price was at \$514/mbf and the predicted DNR timber sale price averaged \$368/mbf. The graph shows the steep fall off in prices to 2009, when logs were at \$316/mbf and stumpage was at \$191/mbf (only 52 percent of the price just three years earlier).



The graph also shows the sharp upturn in log and predicted DNR stumpage prices in the first eleven months of 2010. Log prices have come down in June and July but have been climbing again in the last 4 months. Actual DNR timber sale prices have average \$28/mbf **above** what the model forecast for FY 2010 through 11 months.



Part 3. DNR's Revenue Forecast

This Revenue Forecast includes Department revenues from timber sales on trust lands, leases on trust uplands, and leases on aquatic lands. It also forecasts revenues to individual funds. Some caveats about the uncertainty of forecasting Department revenues are summarized at the end of this section.

Timber revenues

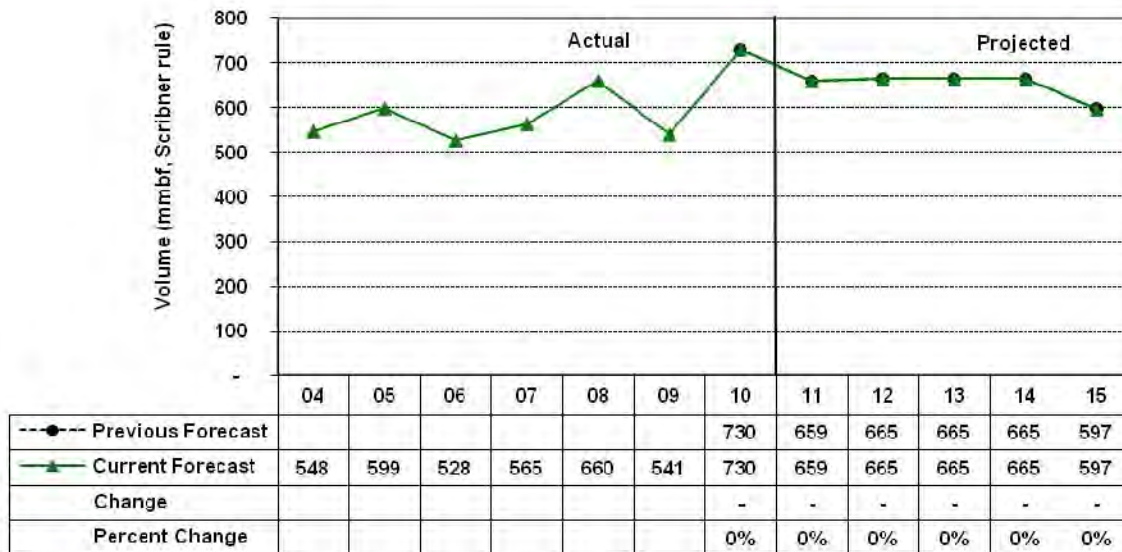
The Washington State Department of Natural Resources (DNR) sells timber through contracts. The Department determines the total volume to be offered for sale each month and the minimum bid for each timber sale. The sale is awarded to the highest bidder and the average sales price (\$/mbf) is set at the time of auction. DNR collects a 10 percent initial deposit at the time of sale and holds it until the sale is completed. Revenues are collected at the time of harvest (removal). The initial deposit is credited as the last 10 percent is harvested.

DNR timber sale contracts sold over the last several years have varied in duration from less than three months to three-and-a-half years, with an average (weighted by volume) of about 22 months. The Department is considering reoffering some sales that have not sold in recent auctions at lengthened contract periods in order to increase interest. The purchaser determines the actual timing of harvest within the terms of the contract. As a result, timber revenues to beneficiaries and DNR management funds lag current market conditions. Currently that lag is about a year.

Timber that is sold but not yet harvested is referred to as “volume under contract” or “inventory”. Timber volume is added to the inventory when it is sold and placed under contract and it is removed from the inventory as the timber is harvested.

Timber Sales Volume. We have made no changes to DNR's planned sales level. Sales were higher in FY 2010 because sales were less than the sustainable level in FY 2009 and some volume was rolled forward into FY2010. The volume sold falls in FY 2015, the first year of the second decade of our current sustainable harvest calculation. (see **Figure 3.1**)

Figure 3.1: Forecast Sales Volume

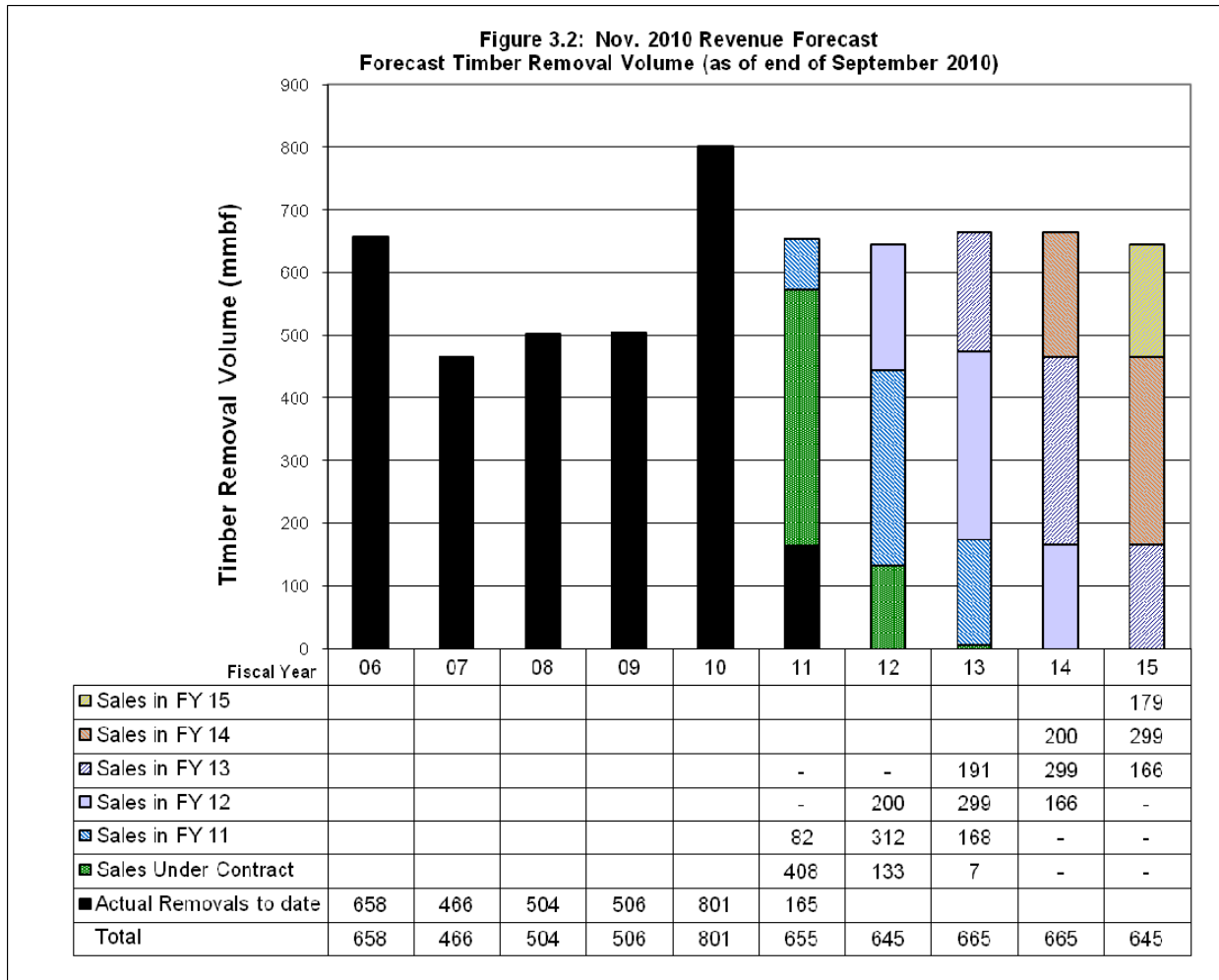


Fiscal year ending June 30

There is some downside risk in that it may be difficult for DNR to make its target timber sales volume for FY 2011. For the first three months of FY 2011, just 56 percent of the volume offered for sale actually sold. But in October and November 91 percent of the volume offered sold and the FY 2011 year-to-date percent sold through November is 74 percent of that offered. Barring a collapse in timber market during the second half of the fiscal year, DNR should have no problem making its target sales volume for the year, and any portion that is not sold will be rolled into FY 2012.

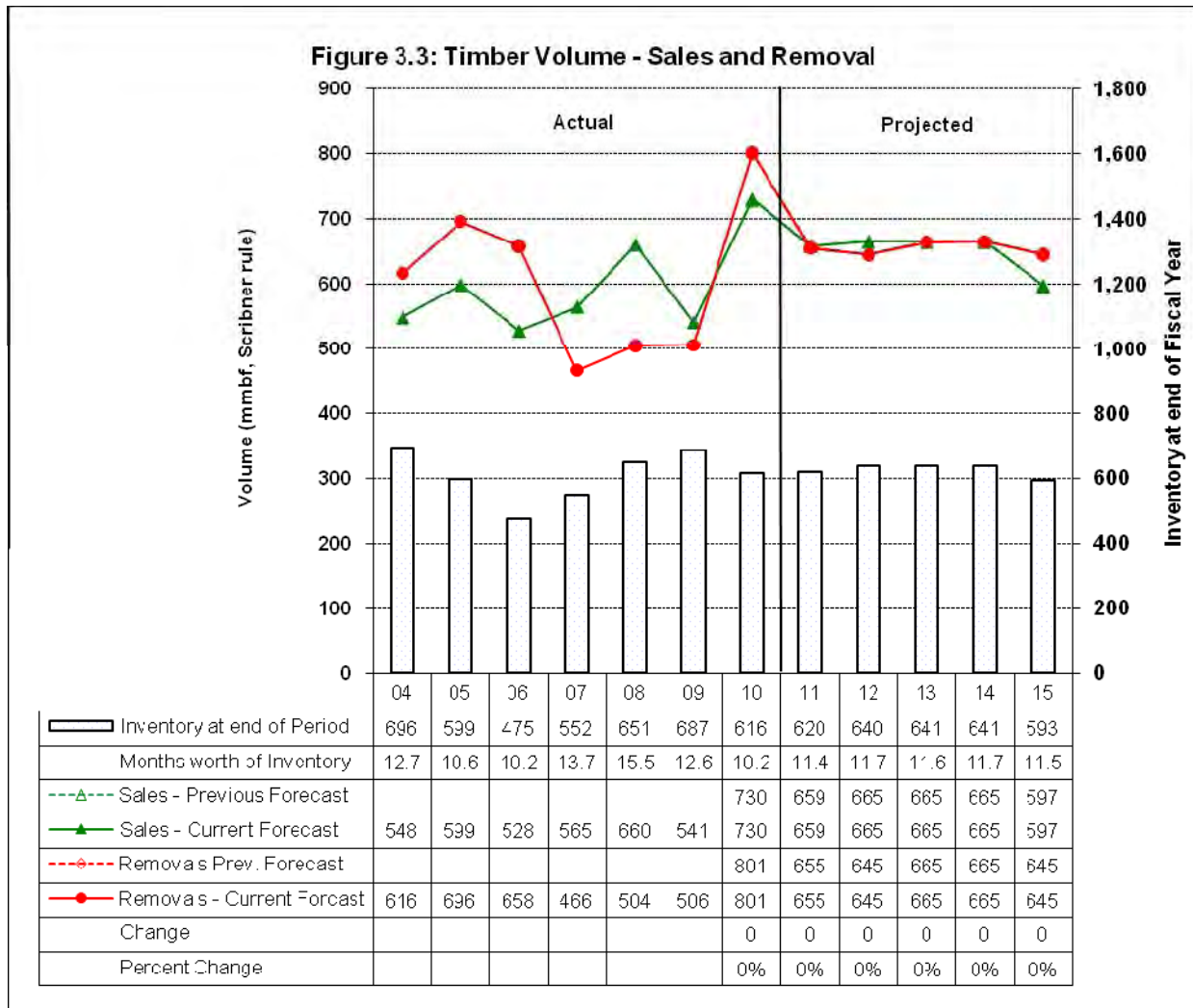
Timber Removal Volume. At the end of September, the Department has 561 mmbf valued at \$134.7 million under contract. This is a reduction in the volume under contract from the 615 mmbf under contract when we did the September Forecast, but it is an increase in the value from \$148.0 million. Volume under contract is typically down in September as sales are low relative to removals in the first half of the fiscal year. In September there was just over 10 months worth of volume under contract at the forecast sales rate but we expect that to increase to almost 12 months worth at the end of the fiscal year as removals slow and sales increase in the remainder of FY 11.

For each Forecast, we survey DNR timber sale purchasers to determine their planned timing of removals from the timber volume they have under contract at the time of the survey. This Forecast's survey, conducted in the first week of October, indicates that purchasers are not planning to significantly modify their harvest plans. Purchasers plan to harvest 408 mmbf, 75 percent of the volume under contract, this fiscal year (FY 2011) and 133 mmbf (24 percent) next biennium (2011-13) (see **Figure 3.2** for detail).



Through September, purchasers removed 165 mmbf. Together with the expected removals of 404 mmbf from volume under contract and another 82 mmbf from timber sales yet to be sold in the current fiscal year, this brings our forecast of total timber removals for FY 2011 to 655 mmbf.

This is one of the first times that we have seen no change in either the volume sold or removed from that in the previous forecast. (See **Figure 3.3** for details).

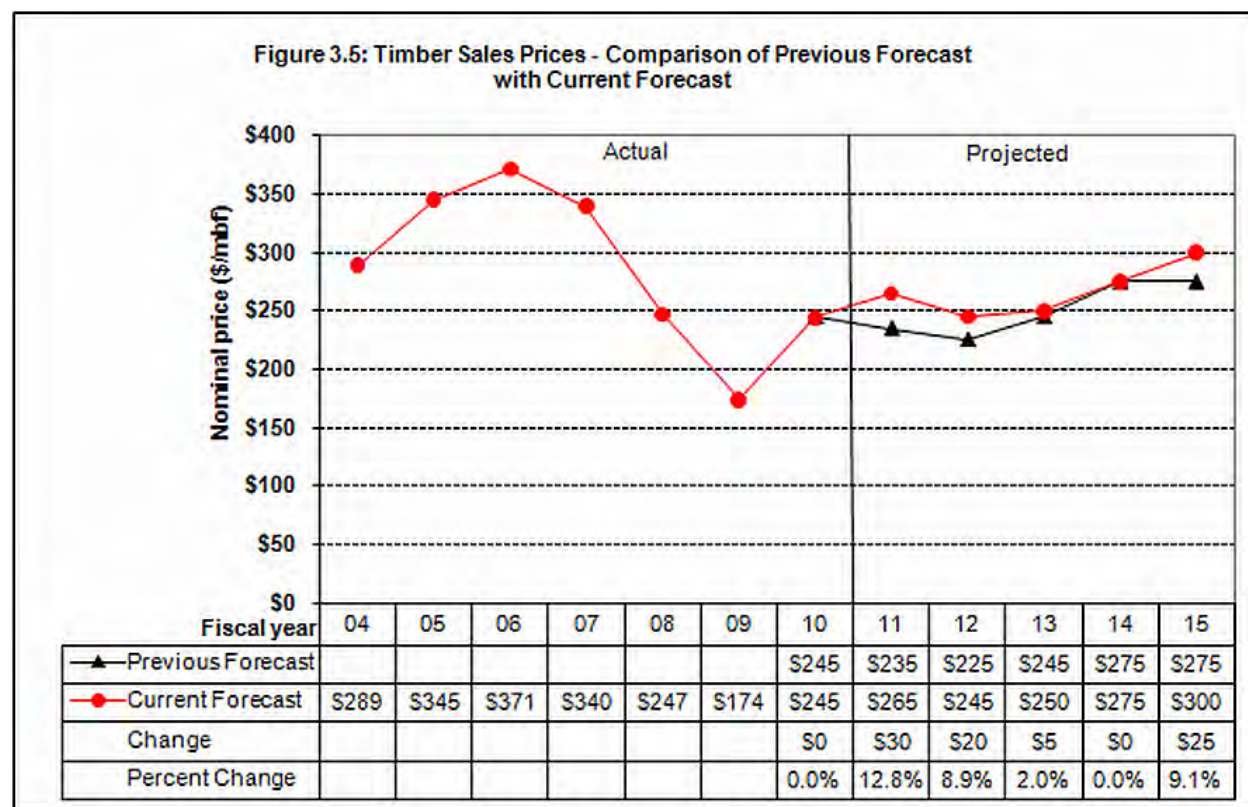
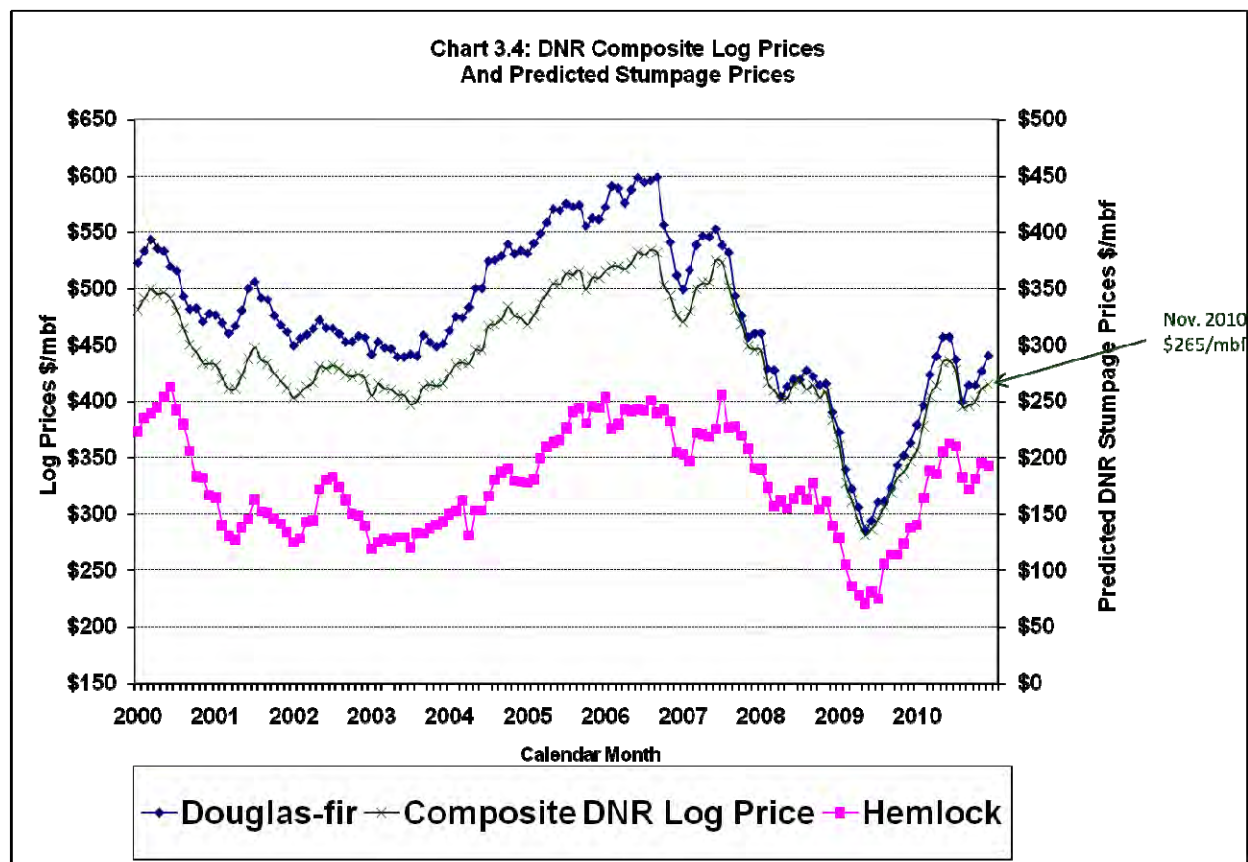


Timber Sales Prices. When we did the September Forecast, the composite (weighted by species) projected stumpage price had fallen to \$245/mbf (\$395/mbf composite log price minus \$150/mbf logging costs). Since then it has increased to \$265 in November. See **Figure 3.4**.

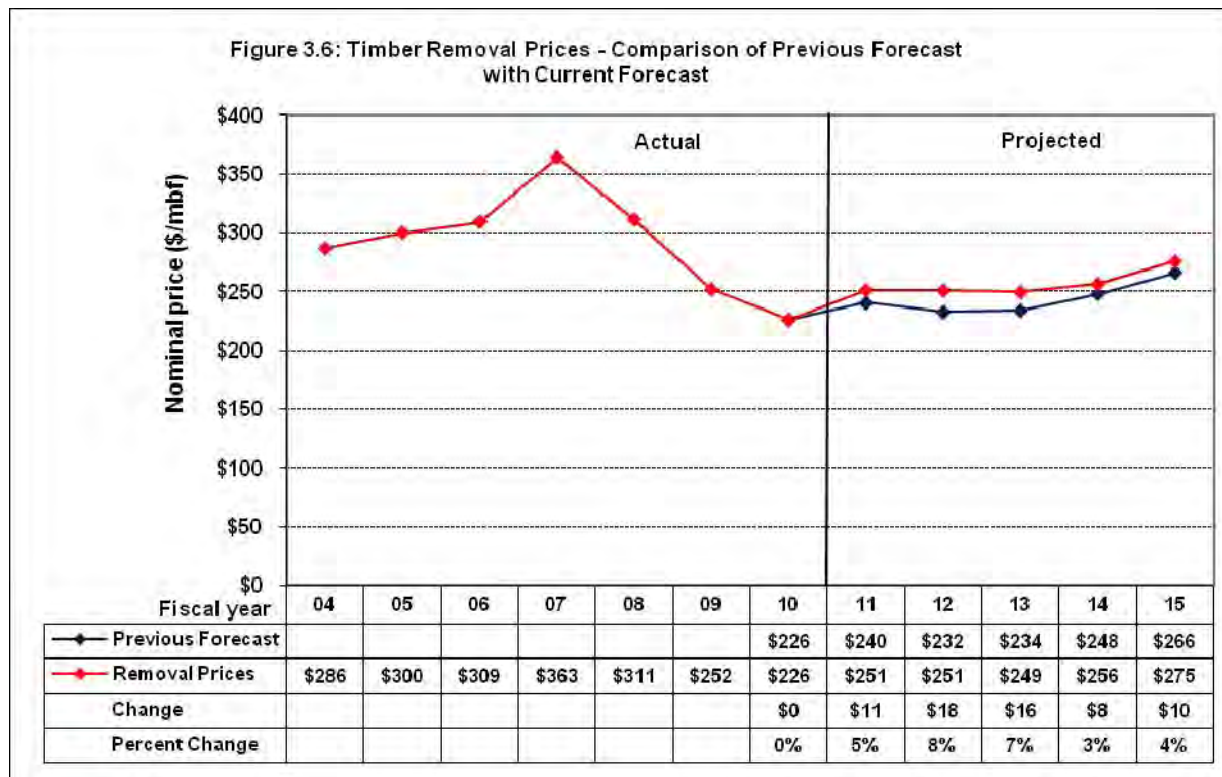
At the current time, log and stumpage markets are being supported by the export market. Accordingly, we are revising our forecast DNR stumpage prices upward for FY 2011 and 2012.

We now expect stumpage prices to average \$265/mbf for FY 2011, up \$30/mbf from that forecast in September (see **Figure 3.5**). We are also revising our stumpage price for FY 2012 upward from \$225/mbf to \$245/mbf. Our forecast timber sale prices for FYs 2013-2014 are little changed.

We have reduced the forecast timber sales price in FY 2015 by \$25/mbf to \$275/mbf. These forecasts of DNR stumpage prices in the next two biennia incorporate our continued pessimism about the long-term recovery of the U.S. housing market, despite current prices that are better than previously forecast.

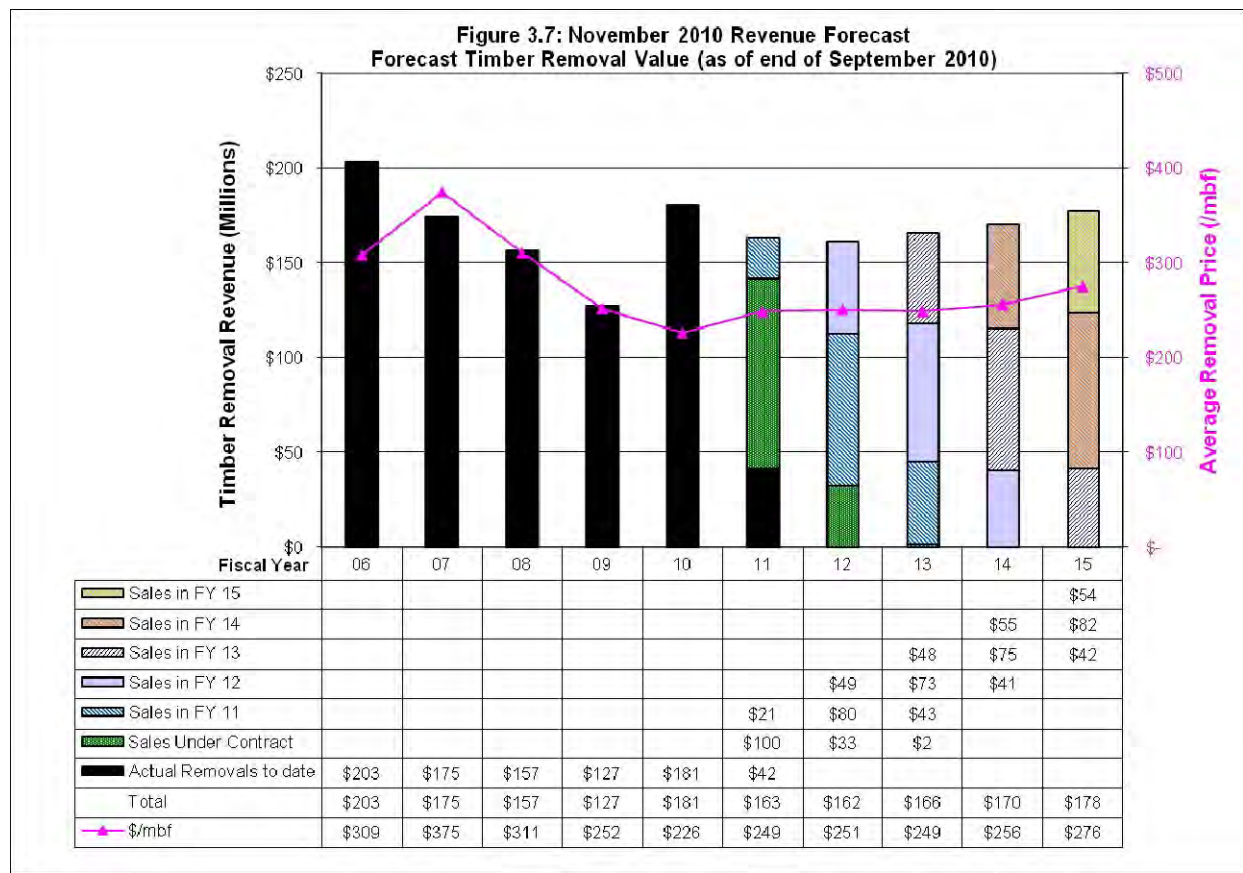


Timber Removal Prices. Timber removal prices are a function of timber sales prices and the timing of the timber's removal. They can be thought of as a moving average of previous timber sales prices, weighted by the volume of sold timber removed in each time period. The removal volumes used to calculate the weights are shown in **Figure 3.2**, which results in a smoothing out and a lag of timber removal prices compared to timber sales prices. For example, sales prices bottomed out at \$174/mbf in FY 2009 (see **Figure 3.5**). As shown in **Figure 3.6**, removal prices are forecasted to bottom out in FY 2010 at \$226/mbf, which would be \$52/mbf higher than the bottom for sales prices.



We are changing our forecast of timber removal prices to show modest increases across the board for the years FYs 2011-2015 (see **Figure 3.6**). The highest increases are in FYs 2012 and 2013 at \$18/mbf and \$16/mbf respectively, reflecting the higher timber sales prices predicted in FYs 2011 and 2012.

Timber Removal Revenues. **Figure 3.7** shows projected annual timber removal revenues and the average removal price for that fiscal year, broken down by the fiscal year in which the timber was sold (“sales under contract” are already sold as of September 2010) or will be sold. Over 56 percent of the forecast timber harvest revenue this biennium (FY 2010 and FY 2011) will come from sold timber already harvested to date, another 35 percent will come from previously sold timber sales currently under contract as of the end of September, and the remaining nine percent will come from harvests on timber sales yet to be sold in FY 2011.

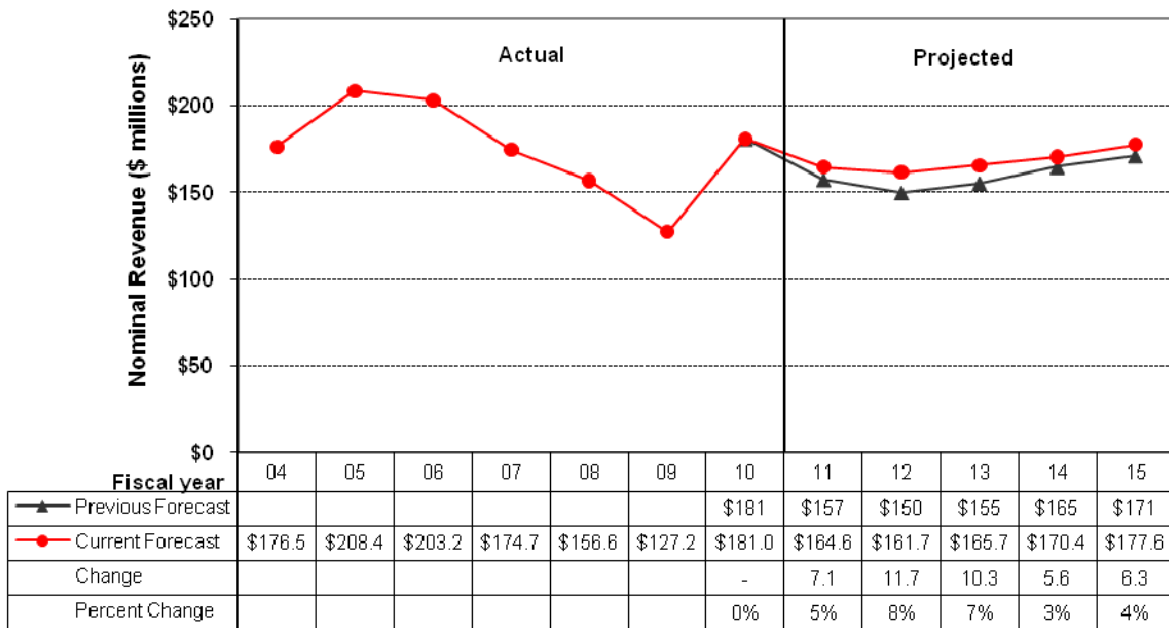


As shown in **Figure 3.7**, most of the timber sold this fiscal year 2011 will be harvested in the next biennium (FYs 2012 and 2013).

Forecast revenues are also up for each year FY 2011 through 2014 because of the higher forecast average annual removal prices.

In the current biennium (FYs 2010 and 2011), we are revising forecast timber removal revenues up by \$7.1 million, or 2.1 percent, to \$345.6 million. See **Figure 3.8** for detail. In the 2011-13 Biennium (FYs 2012 and 2013), forecast timber removal revenues are up by \$22.0 million, or 7.2 percent, to \$327.4 million. In the 2013-15 Biennium, we are revising our forecast of timber removal revenues upward by \$11.9 million, or 3.5 percent, to 348.0 million.

Figure 3.8: Timber Removal Revenues - Comparison of Previous Forecast with Current Forecast, 2004-2015



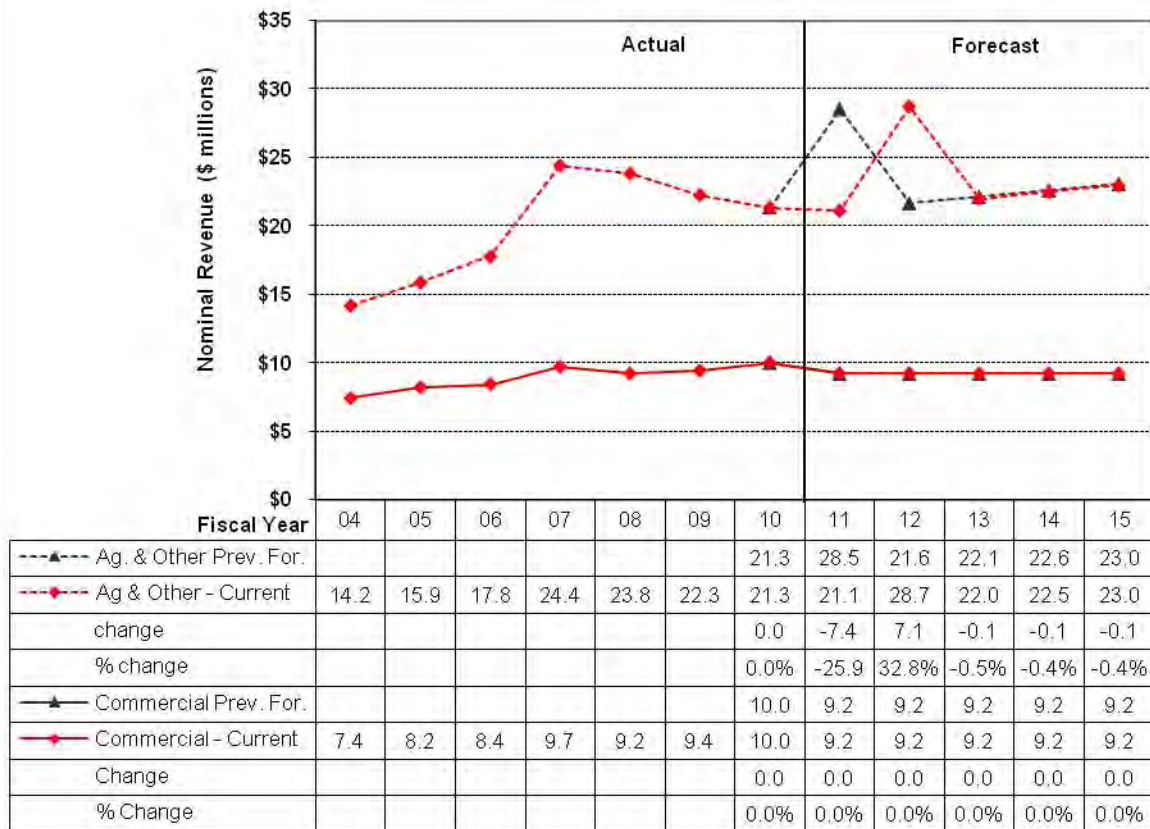
Upland lease revenues

Upland lease revenues are generated primarily from leases and the sale of valuable materials, other than timber, on state trust lands. In this Forecast, upland lease revenues are divided into two categories:

- 1) **Commercial**—Commercial real estate leases.
- 2) **Agricultural and Other**—Agricultural, special use, mineral and hydrocarbon, right-of-way, communication site, and special forest products leases, and sale of valuable materials other than timber.

Commercial. The current U.S. recession has increased the probability that some of DNR's commercial building lessees could vacate and default. Because of the continuing sluggishness of the economic recovery and because commercial real estate especially is in the doldrums, we are leaving our forecast for future years' commercial leasing revenue at the \$9.2 million level. There is more downside risk to this forecast than upside risk because of the bleak outlook for commercial real estate at the present time. The National Association of Realtors expects vacancy rates for office space to increase to 17 percent into 2011 and to hold steady at 13 percent for retail space, with rental rates for both types continuing to fall.

Figure 3.9: Upland Lease Revenue - Comparison of Previous Forecast with Current Forecast, 2004-2015

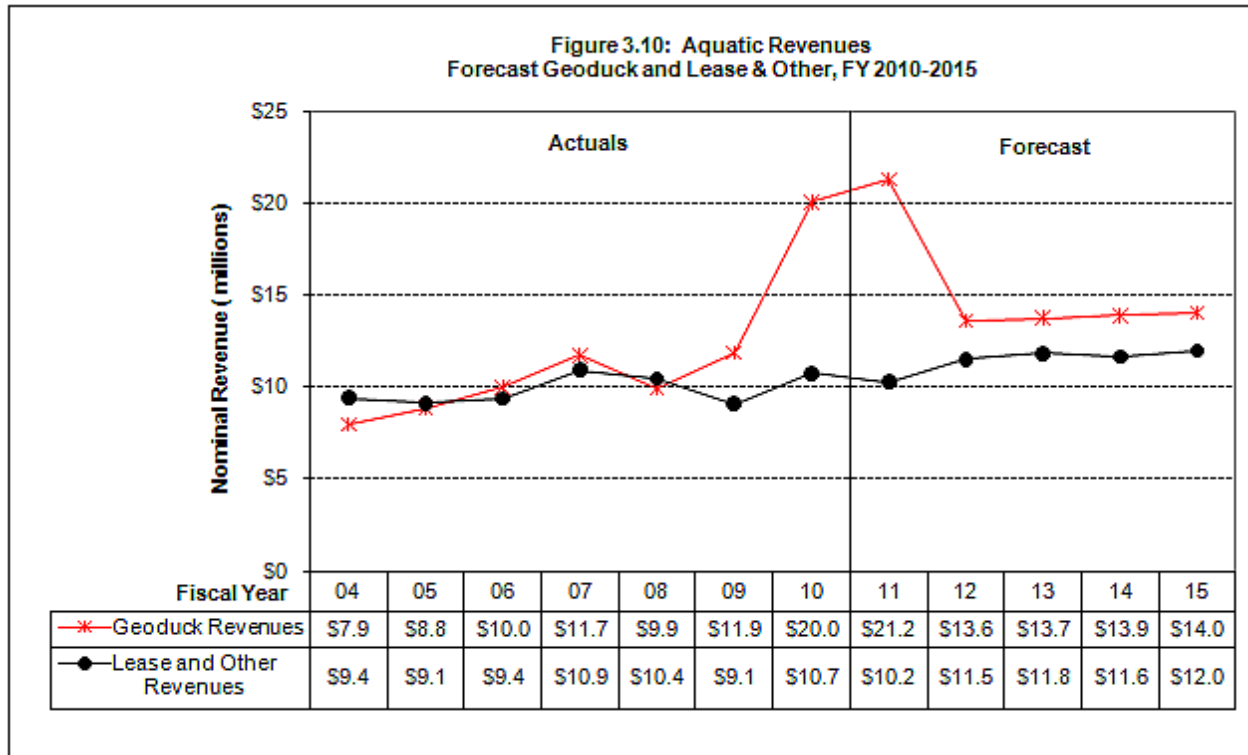


Agricultural and Other. We have not significantly reduced the forecast level of non-timber revenues however we have made two shifts in the expected timing of those revenues. First, \$7.0 million in one-time revenues from the sale of communication towers and equipment is now expected to occur in FY 2012 rather than FY 2011.

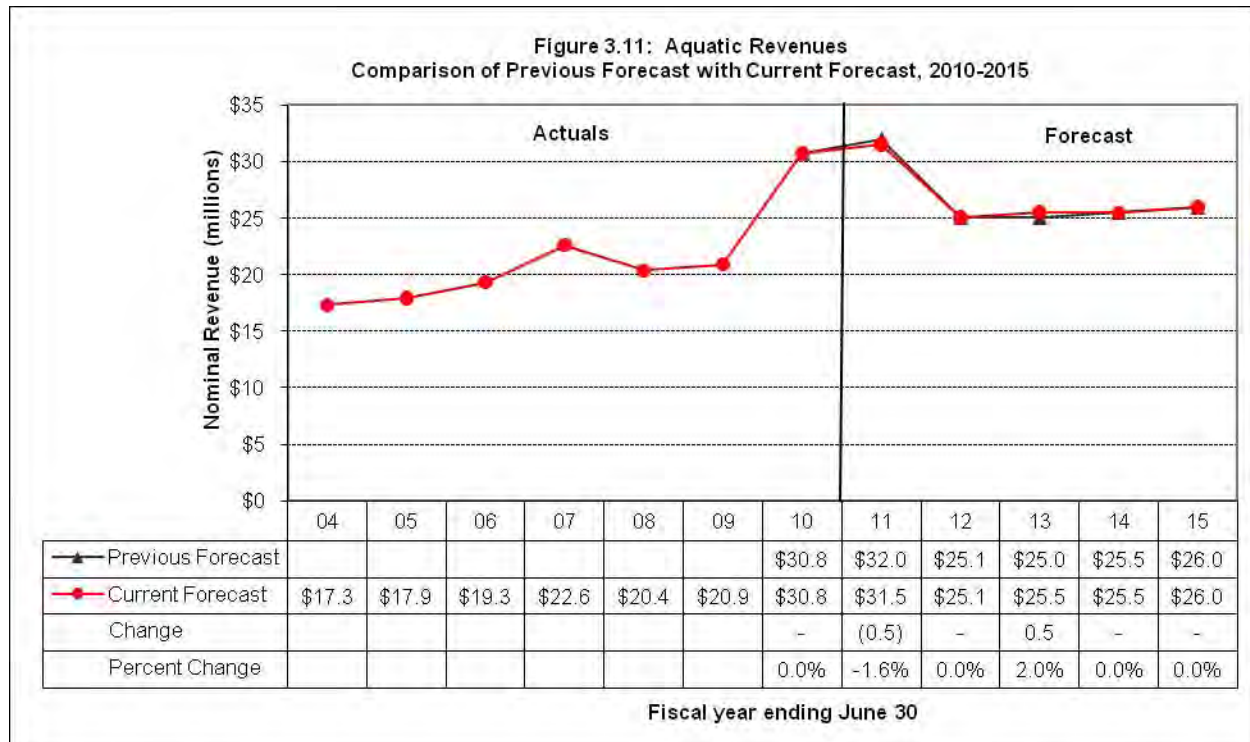
Otherwise, as shown on **Figure 3.9**, we expect revenues in the agricultural and other upland leases category to increase over the forecast period. Revenues should be up on agricultural leases as crop prices rebound. Revenues also should be up in the “other leases” category as wind power leases come on line. There will be a countervailing influence because the outlook is for revenues in the mineral, oil and gas, and rock, sand, and gravel category to be sharply down over the forecast period.

Aquatic lands revenues

Geoduck Revenues. There have been no geoduck auctions since we did the September forecast and we have made no changes to our geoduck revenue forecast. For detail on recent geoduck auctions see the September Forecast write-up.

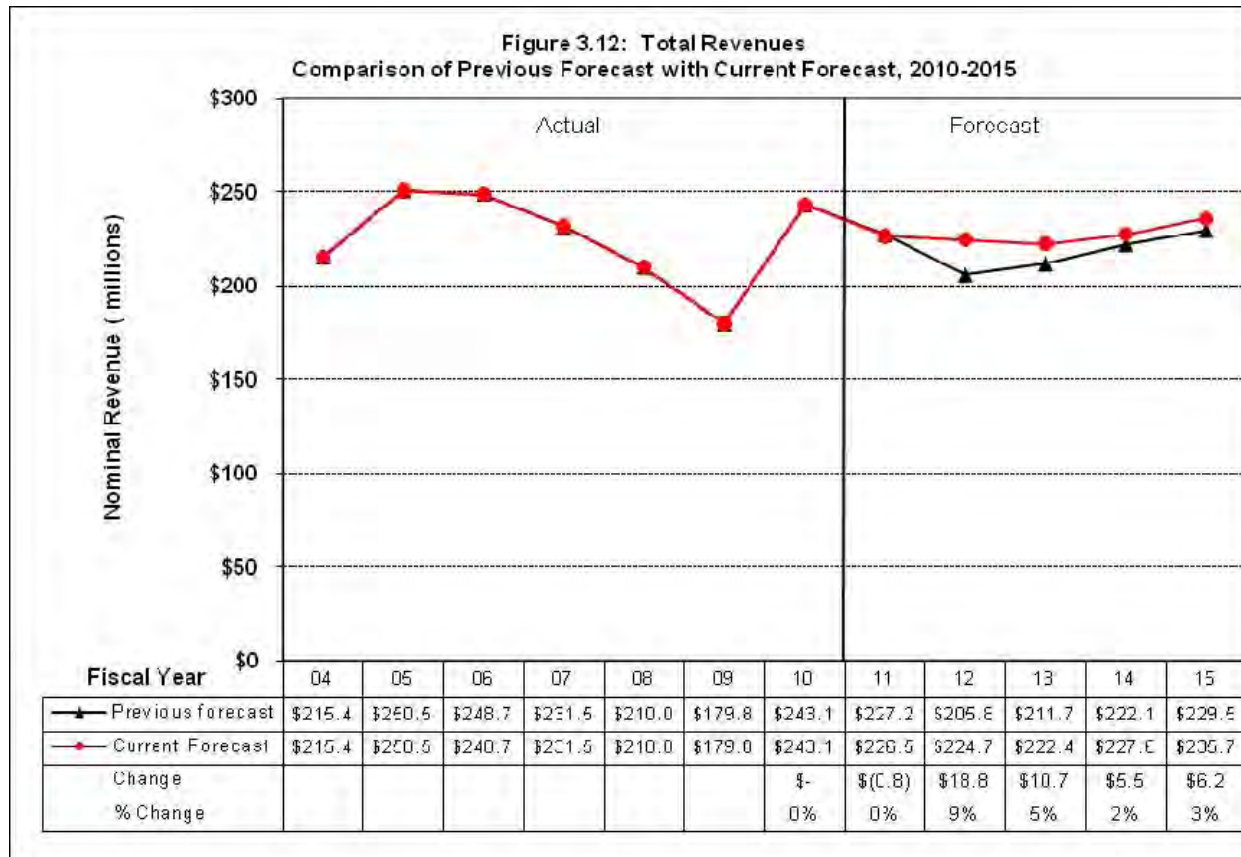


Lease and Other Revenues. Lease and other aquatic revenues continue to come in as forecast. We have made only one small change in the forecast. This is shifting the expected timing of the last two installments of the Taylor Shellfish trespass settlement from FY 2011 and FY 2012 to FY 2012 and FY 2013 (see **Figure 3.11** for detail).



Total revenues from all sources

Forecast revenues for the current biennium (FYs 2010 and 2011) are down from the September Forecast by just \$0.8 million, or 0.2 percent (see **Figure 3.12**). This is due to forecast increase in timber revenues of \$7.1 million (see **Figure 3.8**) was more than offset by the reduction in non-timber revenues.



Revenues during the 2011-13 Biennium (FYs 2012 and 2013) are up from the previous Forecast by \$29.5 million, or 6.8 percent (see **Figure 3.12**). Most of this change is attributable to timber removal revenue being adjusted upward by \$22.0 million (see **Figure 3.8**) due to an \$11/mbf higher predicted removal price (see **Figure 3.6**) while forecast removal volume is unchanged (see **Figure 3.3**). The other \$ 7.5 million increase is due primarily to a shift in timing of non-timber revenues from the current biennium into next biennium.

Current forecast revenues for the 2013-15 Biennium (FYs 2014 and 2015) are up \$11.7 million, or 2.6 percent, from the previous Forecast. This is mostly attributable to timber removal revenue being adjusted upward by \$11.9 million in FY 2014 due to higher timber removal prices than previously predicted. This was partially offset by a \$0.2 million reduction in projected non-timber revenues.

Some caveats

DNR strives to produce the most accurate and objective forecast possible, based on the Department's current policy directions and available information. Actual revenues will depend on future policy decisions made by the Legislature and the Department, as well as market and other conditions beyond DNR's control. Listed below are issues that could potentially have a significant impact on future revenues from DNR-managed lands:

- **U.S. and Global Economic and Financial Crisis.** The United States is still recovering from the deepest and longest recession since the Great Depression. The effects of the burst real estate bubble and the collapse of the financial system in the U.S. crossed over into the larger national economy and into other countries' economies. With the introduction of QE2 we judge that the outlook for the economy has improved since the September forecast.
- **U.S. Housing Market.** It has been over four years since the housing downturn began. Housing starts hit a 50-year low point last year and they remain near the bottom. New home sales hit a new all-time low in July 2010. Housing data remains discouraging and we have reduced our housing starts forecast yet once again and even that may be too optimistic. It is possible that the housing recovery will be pushed back even further by a slower-than-expected economic recovery and an oversupply of existing and new homes. This would likely result in lower timber sales prices than we currently forecast.
- **Timber Sales Volume.** We forecast 659 mmbf in DNR timber sales in FY 2011 and then 665 mmbf annually for FYs 2012 through 2014. This would meet the 1995-2014 decadal sustainable harvest on DNR managed forest lands. There is some risk that DNR will not be able to sustain this level of timber sales because of external economic factors, administrative challenges, and potential litigation over the marbled murrelet and other environmental issues.

These and other future circumstances could have a great impact on future Department revenues. As events and market conditions develop, DNR will incorporate new information into future Forecast updates. At this point we judge the upside risks to our forecast to be greater than the downside risk, primarily because timber sales prices have come in higher than we previously forecast. Naturally, we worry more about the downside risks.

Distribution of revenues

The distribution of timber revenues by trust are based on:

- The value of timber in the inventory (sales sold but not yet harvested);
- The volumes of timber in planned sales for the remainder of FY 2011 and FY 2012; and
- The distribution of the sustainable harvest for FY 2013 through FY 2015.

Timber sales are expected to be harvested on average between 11.4 and 11.7 months after they are sold. (See **Figure 3.3** for details.) Distributions of lease revenues are assumed to be proportional to historic distributions unless otherwise specified.

Since a single timber sale can be worth over \$3 million, dropping, adding, or delaying even one sale can represent a significant shift in revenues to a specific trust fund.

Management Fee Deduction. The budget passed by the Legislature extended the 30 percent Resource Management Cost Account (RMCA) deduction through the end of the 2009-11 Biennium. The RMCA deduction is assumed to return to 25 percent in FY 2012. The forecast RMCA revenues at the 30 percent deduction for FY 2012 and beyond are shown in **Table 3.2B**.

Revenue forecast tables

Tables 3.1 and 3.2 on the following pages provide Forecast details. **Table 3.1** focuses on the source of revenues, and **Table 3.2** focuses on the distribution of revenues. Both tables include historical and projected figures.

| Table 3.1 November 2010 Forecast by Source (In millions of dollars) | | | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | | | | | | |
| | | | | | | | | |
| Change from September 2010 Forecast | | | | | | | | |
| Timber Sales | FY 08 | FY 09 | FY 10 | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 |
| Volume (mmbf) | 660 | 541 | 730 | 659 | 665 | 665 | 665 | 597 |
| Change | - | - | - | - | - | - | - | - |
| % Change | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Price (\$/mbf) | \$247 | \$174 | \$245 | \$265 | \$245 | \$250 | \$275 | \$300 |
| Change | \$0 | \$0 | \$0 | \$30 | \$20 | \$5 | \$0 | \$25 |
| % Change | 0% | 0% | 0% | 13% | 9% | 2% | 0% | 9% |
| Value of Timber Sales (In millions of dollars) | \$ 163.0 | \$ 94.0 | \$ 178.5 | \$ 174.6 | \$ 162.9 | \$ 166.3 | \$ 182.9 | \$ 179.2 |
| Change | \$ - | \$ - | \$ - | \$ 19.8 | \$ 13.3 | \$ 3.3 | \$ - | \$ 14.9 |
| % Change | 0% | 0% | 0% | 13% | 9% | 2% | 0% | 9% |
| Timber Removals | FY 08 | FY 09 | FY 10 | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 |
| Volume (mmbf) | 504 | 506 | 801 | 655 | 645 | 665 | 665 | 645 |
| Change | - | - | - | (0) | (0) | (0) | - | 0 |
| % Change | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Price (\$/mbf) | \$311 | \$252 | \$226 | \$251 | \$251 | \$249 | \$256 | \$275 |
| Change | \$0 | \$0 | \$0 | \$11 | \$18 | \$16 | \$8 | \$10 |
| % Change | 0% | 0% | 0% | 5% | 8% | 7% | 3% | 4% |
| Timber Revenue (In millions of dollars) | \$ 156.6 | \$ 127.2 | \$ 181.0 | \$ 164.6 | \$ 161.7 | \$ 165.7 | \$ 170.4 | \$ 177.6 |
| Change | \$ - | \$ - | \$ - | \$ 7.1 | \$ 11.7 | \$ 10.3 | \$ 5.6 | \$ 6.3 |
| % Change | 0% | 0% | 0% | 5% | 8% | 7% | 3% | 4% |
| Lease Revenue | FY 08 | FY 09 | FY 10 | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 |
| Agricultural and Mineral | \$ 23.8 | \$ 22.3 | \$ 21.3 | \$ 21.1 | \$ 28.7 | \$ 22.0 | \$ 22.5 | \$ 23.0 |
| Change | \$ - | \$ - | \$ - | \$ (7.4) | \$ 7.1 | \$ (0.1) | \$ (0.1) | \$ (0.1) |
| % Change | 0% | 0% | 0% | -26% | 33% | 0% | 0% | 0% |
| Commercial | \$ 9.2 | \$ 9.4 | \$ 10.0 | \$ 9.2 | \$ 9.2 | \$ 9.2 | \$ 9.2 | \$ 9.2 |
| Change | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| % Change | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Aquatic Revenue | \$ 20.4 | \$ 20.9 | \$ 30.8 | \$ 31.5 | \$ 25.1 | \$ 25.5 | \$ 25.5 | \$ 26.0 |
| Change | \$ - | \$ - | \$ - | \$ (0.5) | \$ - | \$ 0.5 | \$ - | \$ - |
| % Change | 0% | 0% | 0% | -2% | 0% | 2% | 0% | 0% |
| Total Lease Revenue | \$ 53.4 | \$ 52.6 | \$ 62.1 | \$ 61.9 | \$ 63.0 | \$ 56.7 | \$ 57.2 | \$ 58.1 |
| Change | \$ - | \$ - | \$ - | \$ (7.9) | \$ 7.1 | \$ 0.4 | \$ (0.1) | \$ (0.1) |
| % Change | 0% | 0% | 0% | -11% | 13% | 1% | 0% | 0% |
| Total All Sources | \$ 210.0 | \$ 179.8 | \$ 243.1 | \$ 226.5 | \$ 224.7 | \$ 222.4 | \$ 227.6 | \$ 235.7 |
| Change | \$ - | \$ - | \$ - | \$ (0.8) | \$ 18.8 | \$ 10.7 | \$ 5.49 | \$ 6.19 |
| % Change | 0% | 0% | 0% | 0% | 9% | 5% | 2% | 3% |
| Note: Trust land transfer is not included in distribution revenues. | | | | | | | | |
| This table excludes interest and Land Bank transactions, fire assessments, permits, and fees. | | | | | | | | |
| Totals may not add due to rounding. | | | | | | | | |

Table 3.2: 2010 November Forecast by Fund (In millions of dollars)

| | | | | | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Change from September 2010 Forecast | | | | | | | | |
| 30% RMCA thru FY 11 | | | | | | | | |
| RMCA AT 30%====> \$ 32.2 \$ 34.4 \$ 35.3 \$ 36.1 | | | | | | | | |
| Management Funds | FY 08 | FY 09 | FY 10 | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 |
| 041 RMCA - Upland | \$ 32.0 | \$ 26.5 | \$ 33.3 | \$ 31.1 | \$ 26.9 | \$ 28.7 | \$ 29.4 | \$ 30.1 |
| Change | \$ - | \$ - | \$ 1.5 | \$ (0.4) | \$ 2.0 | \$ 1.3 | \$ 0.7 | \$ 0.8 |
| % Change | 0% | 0% | 5% | -1% | 8% | 5% | 2% | 3% |
| 041 RMCA - Aquatic | \$ 8.6 | \$ 8.9 | \$ 13.9 | \$ 14.2 | \$ 10.9 | \$ 11.0 | \$ 11.0 | \$ 11.2 |
| Change | \$ - | \$ - | \$ - | \$ (0.3) | \$ - | \$ 0.3 | \$ - | \$ - |
| % Change | 0% | 0% | 0% | -2% | 0% | 2% | 0% | 0% |
| 014 FDA | \$ 18.6 | \$ 17.3 | \$ 25.9 | \$ 22.6 | \$ 23.6 | \$ 20.8 | \$ 21.4 | \$ 23.4 |
| Change | \$ - | \$ - | \$ - | \$ (0.3) | \$ 3.3 | \$ 1.3 | \$ 0.7 | \$ 0.8 |
| % Change | 0% | 0% | 0% | -1% | 16% | 6% | 3% | 4% |
| Total Management Funds | \$ 59.2 | \$ 52.7 | \$ 71.6 | \$ 68.0 | \$ 61.3 | \$ 60.6 | \$ 61.8 | \$ 64.7 |
| Change | \$ - | \$ - | \$ - | \$ (1.0) | \$ 5.3 | \$ 2.8 | \$ 1.4 | \$ 1.6 |
| % Change | 0% | 0% | 0% | -1% | 9% | 5% | 2% | 3% |
| | | | | | | | | |
| Current Funds | FY 08 | FY 09 | FY 10 | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 |
| 113 Common School Construction | \$ 56.6 | \$ 41.5 | \$ 47.9 | \$ 48.8 | \$ 57.1 | \$ 59.8 | \$ 61.2 | \$ 62.9 |
| Change | \$ - | \$ - | \$ - | \$ (2.5) | \$ 4.3 | \$ 2.4 | \$ 1.2 | \$ 1.5 |
| % Change | 0% | 0% | 0% | -5% | 8% | 4% | 2% | 3% |
| 999 Forest Board Counties | \$ 52.5 | \$ 48.6 | \$ 67.9 | \$ 61.4 | \$ 61.8 | \$ 54.1 | \$ 55.5 | \$ 58.4 |
| Change | \$ - | \$ - | \$ - | \$ 1.4 | \$ 6.3 | \$ 3.3 | \$ 1.8 | \$ 2.0 |
| % Change | 0% | 0% | 0% | 2% | 11% | 6% | 3% | 4% |
| 001 General Fund | \$ 3.0 | \$ 1.4 | \$ 5.0 | \$ 2.9 | \$ 3.3 | \$ 2.8 | \$ 2.9 | \$ 3.2 |
| Change | \$ - | \$ - | \$ - | \$ (0.0) | \$ 1.2 | \$ 0.2 | \$ 0.1 | \$ 0.1 |
| % Change | 0% | 0% | 0% | -2% | 54% | 7% | 4% | 3% |
| 348 University Bond Retirement | \$ 2.3 | \$ 3.4 | \$ 1.8 | \$ 0.9 | \$ 1.2 | \$ 1.6 | \$ 1.7 | \$ 2.1 |
| Change | \$ - | \$ - | \$ - | \$ (0.0) | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 |
| % Change | 0% | 0% | 0% | -5% | 8% | 6% | 3% | 3% |
| 347 WSU Bond Retirement | \$ 1.2 | \$ 1.6 | \$ 1.2 | \$ 1.1 | \$ 1.2 | \$ 1.2 | \$ 1.2 | \$ 1.3 |
| Change | \$ - | \$ - | \$ - | \$ (0.1) | \$ 0.0 | \$ (0.0) | \$ (0.0) | \$ (0.0) |
| % Change | 0% | 0% | 0% | -6% | 4% | 0% | 0% | 0% |
| 042 CEP&RI | \$ 3.8 | \$ 3.8 | \$ 5.6 | \$ 5.4 | \$ 5.4 | \$ 5.9 | \$ 6.1 | \$ 6.5 |
| Change | \$ - | \$ - | \$ - | \$ 0.7 | \$ 0.1 | \$ 0.3 | \$ 0.2 | \$ 0.2 |
| % Change | 0% | 0% | 0% | 15% | 2% | 6% | 4% | 3% |
| 036 Capitol Building Construction | \$ 5.2 | \$ 5.7 | \$ 8.7 | \$ 7.7 | \$ 7.2 | \$ 7.6 | \$ 7.8 | \$ 7.6 |
| Change | \$ - | \$ - | \$ - | \$ 0.1 | \$ 0.6 | \$ 0.5 | \$ 0.3 | \$ 0.2 |
| % Change | 0% | 0% | 0% | 1% | 9% | 7% | 3% | 3% |
| 061/3 Normal (CWU, EWU, WWU, TESC) | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 |
| Change | \$ - | \$ - | \$ - | \$ (0.0) | \$ 0.0 | \$ (0.0) | \$ (0.0) | \$ (0.0) |
| % Change | 0% | 0% | 0% | -2% | 0% | 0% | 0% | 0% |
| Other Funds | \$ 0.2 | \$ 0.4 | \$ 0.1 | \$ 0.0 | \$ 0.0 | \$ 0.3 | \$ 0.3 | \$ 0.5 |
| Change | \$ - | \$ - | \$ - | \$ (0.0) | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 |
| % Change | 0% | 0% | 0% | -14% | 16% | 11% | 9% | 4% |
| Total Current Funds | \$ 125.0 | \$ 106.5 | \$ 138.3 | \$ 128.3 | \$ 137.3 | \$ 133.4 | \$ 137.0 | \$ 142.6 |
| Change | \$ - | \$ - | \$ - | \$ (0.4) | \$ 12.6 | \$ 6.8 | \$ 3.7 | \$ 4.2 |
| % Change | 0% | 0% | 0% | 0% | 10% | 5% | 3% | 3% |
| (Continued) | | | | | | | | |

[illegible]

Note: Trust land transfer is not included in distribution revenues.

This table excludes interest and Land Bank transactions, fire assessments, permits, and fees.

Totals may not add due to rounding.

Table 3.2B: 2010 November Forecast by Fund (In millions of dollars)

Assuming 30 % RMCA Deduction for FY 2012-2015

| | | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 |
|-------------------------------|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Management Funds | | | | | | | | | | | |
| 041 | RMCA - Upland | \$ 38.2 | \$ 35.2 | \$ 32.0 | \$ 26.5 | \$ 33.3 | \$ 31.1 | \$ 32.2 | \$ 34.4 | \$ 35.3 | \$ 36.1 |
| | Change | | | | | | | \$ 5.4 | \$ 5.7 | \$ 5.9 | \$ 6.0 |
| 041 | RMCA - Aquatic | \$ 8.3 | \$ 9.9 | \$ 8.6 | \$ 8.9 | \$ 13.9 | \$ 14.2 | \$ 10.9 | \$ 11.0 | \$ 11.0 | \$ 11.2 |
| | Change | | | | | | | \$ - | \$ - | \$ - | \$ - |
| 014 | FDA | \$ 22.7 | \$ 20.8 | \$ 18.6 | \$ 17.3 | \$ 25.9 | \$ 22.6 | \$ 23.6 | \$ 20.8 | \$ 21.4 | \$ 23.4 |
| | Change | | | | | | | \$ - | \$ - | \$ - | \$ - |
| Total Management Funds | | \$ 69.2 | \$ 65.9 | \$ 59.2 | \$ 52.7 | \$ 73.1 | \$ 68.0 | \$ 66.7 | \$ 66.3 | \$ 67.7 | \$ 70.7 |
| | Change | | | | | | | \$ 5.4 | \$ 5.7 | \$ 5.9 | \$ 6.0 |
| Current Funds | | | | | | | | | | | |
| 113 | Common School Construction | \$ 64.3 | \$ 56.5 | \$ 56.6 | \$ 41.5 | \$ 47.9 | \$ 48.8 | \$ 53.3 | \$ 55.8 | \$ 57.1 | \$ 58.7 |
| | Change | | | | | | | \$ (3.8) | \$ (4.0) | \$ (4.1) | \$ (4.2) |
| 999 | Forest Board Counties | \$ 72.6 | \$ 63.6 | \$ 52.5 | \$ 48.6 | \$ 67.9 | \$ 61.4 | \$ 61.8 | \$ 54.1 | \$ 55.5 | \$ 58.4 |
| | Change | | | | | | | \$ - | \$ - | \$ - | \$ - |
| 001 | General Fund | \$ 2.9 | \$ 2.9 | \$ 3.0 | \$ 1.4 | \$ 5.0 | \$ 2.9 | \$ 3.3 | \$ 2.8 | \$ 2.9 | \$ 3.2 |
| | Change | | | | | | | \$ - | \$ - | \$ - | \$ - |
| 348 | University Bond Retirement | \$ 2.3 | \$ 0.9 | \$ 2.3 | \$ 3.4 | \$ 1.8 | \$ 0.9 | \$ 1.1 | \$ 1.5 | \$ 1.6 | \$ 1.9 |
| | Change | | | | | | | \$ (0.1) | \$ (0.1) | \$ (0.1) | \$ (0.1) |
| 347 | WSU Bond Retirement | \$ 1.1 | \$ 1.1 | \$ 1.2 | \$ 1.6 | \$ 1.2 | \$ 1.1 | \$ 1.2 | \$ 1.2 | \$ 1.2 | \$ 1.2 |
| | Change | | | | | | | \$ (0.1) | \$ (0.0) | \$ (0.0) | \$ (0.0) |
| 042 | CEP&RI | \$ 3.8 | \$ 6.7 | \$ 3.8 | \$ 3.8 | \$ 5.6 | \$ 5.4 | \$ 5.0 | \$ 5.5 | \$ 5.7 | \$ 6.1 |
| | Change | | | | | | | \$ (0.4) | \$ (0.4) | \$ (0.4) | \$ (0.4) |
| 036 | Capitol Building Construction | \$ 7.0 | \$ 6.0 | \$ 5.2 | \$ 5.7 | \$ 8.7 | \$ 7.7 | \$ 6.7 | \$ 7.1 | \$ 7.3 | \$ 7.1 |
| | Change | | | | | | | \$ (0.5) | \$ (0.5) | \$ (0.5) | \$ (0.5) |
| 061/3/5/6 | Normal (CWU, EWU, WWU, TES) | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 | \$ 0.1 |
| | Change | | | | | | | \$ (0.0) | \$ (0.0) | \$ (0.0) | \$ (0.0) |
| Other Funds | | | | | | | | | | | |
| | Change | \$ 0.0 | \$ 0.5 | \$ 0.2 | \$ 0.4 | \$ 0.1 | \$ 0.0 | \$ 0.0 | \$ 0.3 | \$ 0.3 | \$ 0.4 |
| | | | | | | | | \$ (0.0) | \$ (0.0) | \$ (0.0) | \$ (0.0) |
| Total Current Funds | | \$ 154.2 | \$ 138.3 | \$ 125.0 | \$ 106.5 | \$ 138.3 | \$ 128.3 | \$ 132.5 | \$ 128.4 | \$ 131.8 | \$ 137.2 |
| | Change | | | | | | | \$ (4.8) | \$ (5.1) | \$ (5.2) | \$ (5.3) |
| | | | | | | | | (0) | (0) | 0 | (0) |
| (Continued) | | | | | | | | | | | |

Assuming 30 % RMCA Deduction for FY 2012-2015

| | | | | | |
|-------|---|--|--|--|--|
| Note: | Trust land transfer is not included in distribution revenues. | | | | |
| | This table excludes interest and Land Bank transactions, fire assessments, permits, and fees. | | | | |
| | Totals may not add due to rounding. | | | | |